

# **Pima Regional Trail System** *Master Plan*



DRAFT

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# Pima Regional Trail System Master Plan

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prepared for:  
City of Tucson Parks and Recreation  
and  
Pima County Natural Resources,  
Parks and Recreation



Big Saguaro, Tucson Mountain Park







# Executive Summary



The Pima Regional Trail System Master Plan Update is a trail system plan based on respectful mutual accommodation; all users share all paths and trails unless there is a safety issue or technical limitation. Only motor vehicles users are not permitted on the trail system. The Update is a result of a planning process that included analysis of existing and potential trail routes, public meetings, Advisory Group input, and city and county park commission presentations.

The goal of the Update is to expand the trail system both internally to the urban areas of the area's jurisdictions and to explore new opportunities in the outlying areas. To do this, the Plan builds on the efforts of the previous Master Plan, further exploring the urban context of downtown Tucson, identifying opportunities for trail facilities that might not meet the criteria for what is considered a standard trail, but nonetheless are important in making system connections.

The updated trail system consists of 820 miles of existing and proposed trails, paths, greenways, river parks, bicycle boulevards, and enhanced corridors that connect regional destinations, parks, schools, and preserve areas. In addition, there are 1,410 miles of backcountry level trails. New trail segments range from small segments that infill the trail system to close gaps to long segments that criss-cross the southern area of Tucson where development is just beginning. The trail system includes trails parks, trailheads, and boundary access points that will increase user access to the system. Detailed design standards will guide the development of future improvements, ensuring that the trail facilities in Pima County are consistent so users can safely and confidently find their way through the system.

The Plan is organized in four main sections: **Background**, **System Features**, **Master Plan**, and **Implementation**.

**Background:** Covers the history of trails planning in Pima County, recent trends in trails planning and the benefits of trails, the planning process and what issues were identified by the public.

**System Features:** Describes the unique elements of the Pima Regional Trail System.

**Master Plan:** Reviews the vision and goals of the project, the main and supporting elements of the plan, facility standards, and descriptions of regional facilities.

**Implementation:** Includes a list of possible actions and recommended funding sources for building the facilities.

# **Pima Regional Trail System** *Master Plan*

It should be noted that this is a living document. Growth and development will continually provide new opportunities and challenges for trail system improvements. Each project should be considered on a case-by-case basis and each project will need to be adjusted to the physical constraints of the site and adjacent properties. Projects are not prioritized. Each one is important to the overall system and should be constructed or improved when the opportunity arises.





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# Acronyms and Glossary



AAA	American Automobile Association
ADA	Americans With Disability Act
ADOT	Arizona Department of Transportation
AFB	Air Force Base
AASHTO	American Association of State Highway and Transportation Officials
BAP	Boundary Access Point
BLM	Bureau of Land Management
BOR	Bureau of Reclamation
CAP	Central Arizona Project
CAWCD	Central Arizona Water Conservation District
EEF	Environmental Enhancement Fee
EPCTSMP	Eastern Pima County Trail System Master Plan 1989, 1996
EPNG	El Paso Natural Gas
FHWA	Federal Highway Administration
GIS	Geographic Information System
GPS	Global Positioning System
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Traffic Engineers
LWCF	Land and Water Conservation Fund
MAG	Maricopa Association of Governments
MUTCD	Manual on Uniform Traffic Control Devices
NCA	National Conservation Area
NRPR	Natural Resources, Parks and Recreation (a division of Pima County)
PAG	Pima Association of Governments
R&PP	Recreation and Public Purposes Act (a BLM acronym)
RCA	Resource Conservation Area
RFCD	Regional Flood Control District
ROW	Right-of-way
RTA	Regional Transportation Authority
SAFETEA	Safe, Accountable, Flexible and Efficient Transportation Equity Act
TE	Transportation Enhancement
TH1, TH2	Trailhead 1, Trailhead 2
TH-E	Trailhead with Equestrian Facilities
TMP	Tucson Mountain Park
UA	University of Arizona
USDA	United States Department of Agriculture

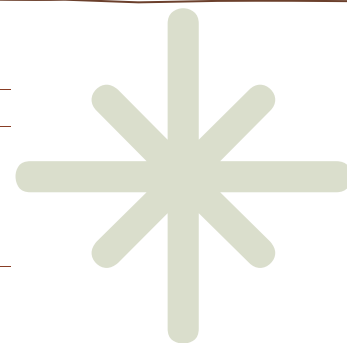
## GLOSSARY AND ACRONYMS

<b>Abutment</b>	Structure at either extreme end of a bridge that supports the superstructure (sill, stringers, trusses, or decks) composed of stone, concrete, brick, or timber.
<b>Access</b>	The opportunity to approach, enter, or make use of public lands.
<b>Access Points</b>	Designated areas and passageways that allow the public to reach a trail from adjacent streets or community facilities.
<b>Accessible</b>	A term used to describe a site, building, facility, or trail that complies with the Americans with Disabilities Act (ADA) Accessibility Guidelines and can be approached, entered, and used by people with disabilities.
<b>Aesthetics</b>	Relates to the pleasurable characteristics of a physical environment as perceived through the five senses of sight, sound, smell, taste, and touch.
<b>Alignment</b>	The layout of the trail in horizontal and vertical planes. The bends, curves, and ups and downs of the trail. The more the alignment varies, the more challenging the trail.
<b>Amenity</b>	Any element used to enhance the user's experience and comfort along a trail.
<b>At-Grade Crossing</b>	A trail crossing a roadway on the same elevation. Ideally, a safe at-grade crossing has either light automobile traffic or a traffic signal that can be activated by trail users.
<b>Backcountry</b>	An area where there are no maintained roads or permanent buildings, just primitive roads and trails.
<b>Barricade</b>	A portable or fixed barrier having object markings, used to close all or a portion of the trail right-of-way to traffic.
<b>Bike Lane</b>	A portion of a roadway that has been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicyclists.
<b>Bollard</b>	A barrier post, usually 30 to 42 inches in height, used to block vehicular traffic at trail access points. Should be installed in odd numbers (one or three). Also an electric light post found alongside trails.
<b>Clearing</b>	Removal of windfall trees, uproots, leaning trees, loose limbs, wood chunks, etc. from both the vertical and horizontal trail corridor.
<b>Connectivity</b>	The ability to create functionally contiguous blocks of land or water through linkage of similar native landscapes; the linking of trails, greenways, and communities.
<b>Crosswalk</b>	Any portion of a roadway distinctly indicated for pedestrian crossing by lines or other markings on the surface.
<b>Cultural Resource</b>	The physical remains of human activity (such as artifacts, ruins, burial mounds, petroglyphs, etc.) having scientific, prehistoric, or social values.
<b>Debris</b>	Any undesirable material that encroaches on a trail and hinders the intended use.
<b>Double Track</b>	Double-track trails accommodate a four-wheel vehicle or side-by-side travel. Also see Single Track.
<b>Drainage</b>	The way in which water flows downhill and/or off the trail.
<b>Drosscapes</b>	Drosscapes are large tracts of land, often on the peripheries of cities and beyond. They include contaminated former industrial sites, mineral workings, garbage dumps, container stores, polluted river banks, sewage works, and expanses of tarmac used for airport parking lots and military compounds. The word was coined by Harvard University's department of landscape architecture.
<b>Easement</b>	Grants the right to use a specific portion of land for a specific purpose or purposes. Easements may be limited to a specific period of time or may be granted in perpetuity; or the termination of the easement may be predicated upon the occurrence of a specific event. An easement agreement survives transfer of land ownership and is generally binding upon future owners until it expires on its own terms.
<b>Encroachment</b>	Unauthorized use of trail or greenway right-of-way or easements as for signs, fences, buildings, etc.
<b>Erosion</b>	Natural processes (water, wind, ice, or other physical processes) by which soil particles are detached from the ground surface and moved downslope, principally by the actions of running water (gully, rill, or sheet erosion). The combination of water falling on the trail, running down the trail, and freezing and thawing, and the wear and tear from traffic create significant erosion problems on trails.





<b>Equestrian</b>	Pertains to horses, horsemen, horsemanship or the act of riding on horseback.
<b>Grade</b>	The vertical distance of ascent or descent of the trail expressed as a percentage of the horizontal distance, commonly measured as a ratio of rise to length or as a percent. For example, a trail that rises 8 vertical feet in 100 horizontal feet has an 8% grade. Grade is different than angle; angle is measured with a straight vertical as 90° and a straight horizontal as 0°. A grade of 100% would have an angle of 45°.
<b>Graffiti</b>	Any writing, printing, marks, signs, symbols, figures, designs, inscriptions, or other drawings that are scratched, scrawled, painted, drawn, or otherwise placed on any surface of a building, wall, fence, trail tread, or other structure on trails or greenways and which have the effect of defacing the property.
<b>Habitat</b>	A place that supports a plant or animal population because it supplies that organism's basic requirements of food, water, shelter, living space, and security.
<b>Maintenance</b>	Repair, improvements, or other work that is carried out on or near a trail to keep a trail in its originally constructed serviceable condition or to improve the safety and sustainability of the site. Usually limited to minor repair or improvements that do not significantly change the trail location, width, surface, or structures.
<b>Open Space</b>	Areas of natural quality, either publicly or privately owned, designated for protection of natural resources, nature-oriented outdoor recreation, or trail-related activities. In urban settings areas of land not covered by structures, driveways, or parking lots.
<b>Park</b>	Any area that is predominately open space with natural vegetation and landscaping used principally for active or passive recreation.
<b>Pedestrian</b>	Any person traveling by foot, or any mobility-impaired person using a wheelchair, whether manually operated or motorized.
<b>Rail-Trail (Rail-to-Trail)</b>	A multi-purpose, public path or trail (paved or natural) created along an inactive railroad corridor.
<b>Shared-use</b>	Shared-use paths are facilities designed for travel by a variety of nonmotorized users, including bicyclists, pedestrians, skaters, runners, and others.
<b>Shoulder</b>	The side or edge of the trail; the side or edge of a rock. The paved portion of a highway, which is contiguous to the travel lanes, allowing motor vehicle use in emergencies. They can also be for specialized use by pedestrians and bicyclists.
<b>Sight Line (Sight Distance)</b>	The visible and unobstructed forward and rear view seen by a trail user from a given point along the trail.
<b>Single Track</b>	A narrow hiking or mountain bike trail wide enough for one user or single file travel. Also see Double Track.
<b>Slope</b>	Rising or falling natural (or created) incline of the land, as shown on contour maps. Generally refers to the hillside (land) and not the trail, as trail "slope" is called the grade.
<b>TOUCAN</b>	The Two GroUps CAN cross (TOUCAN) system was designed to provide a safe crossing for two groups - pedestrians and bicyclists. TOUCAN systems are placed at locations of heavy bicycle and pedestrian crossing activity and along roadways that are prioritized for non-motorized uses, sometimes known as "Bike Boulevards." An added benefit to the TOUCAN signal system is that motorized traffic is not allowed to proceed through these signals, decreasing the number of cars on neighborhood streets, and enhancing the neighborhood's quality of life. A TOUCAN can be activated only by bicyclists or by pedestrians. Both use a push button to activate the signal. Bicyclists respond to an innovative bicycle signal and use a special lane when crossing. Pedestrians get a standard WALK indication and have a separate, adjacent crosswalk. The system uses a standard signal for motorists. ( <a href="http://www.dot.tucsonaz.gov">www.dot.tucsonaz.gov</a> )
<b>Vandalism</b>	Malicious destruction or defacement of someone else's property.
<b>Vegetation</b>	Plant life; growing plants.





# Background

## In this chapter

The importance of trails in and around Pima County and their history

### A. Introduction

The *Pima Regional Trail System Master Plan* is intended to serve as a blueprint for the development of a high quality, interconnected, multi-modal, regional trail system in eastern Pima County. The plan is an update of the 1989 and 1996 *Eastern Pima County Trail System Master Plan*.

The preparation of this plan was a collaborative effort involving local citizens, Pima County, the cities of Tucson and South Tucson, and the towns of Marana, Oro Valley, and Sahuarita. Also participating were representatives of federal and state land management agencies.

This Master Plan report includes:

- A vision for trails within the community
- The goals and specific principles for trail system development
- Trail system map
- Trail development standards
- Implementation

The main elements of the proposed regional path and trail system are:

- Trails
- Backcountry Trails
- Paths
- River Parks
- Greenways
- Enhanced Bicycle/Pedestrian Corridors
- Bicycle Boulevards
- Trails Parks

The supporting elements are:

- Trailheads, Entry Nodes, and Boundary Access Points
- Crossings
- Signs
- Pedestrian Districts
- Pedestrian Activity Areas

Each of these elements and supporting elements are described in more detail in the Master Plan section of this report.



**For the purposes of  
this document and  
a growing industry  
standard:**

Paths = paved surface  
(concrete, asphalt, or similar)

Trails = unpaved surface  
(natural or improved granite type surface)





## B. History of Trail Use and Trail Planning in Eastern Pima County

The Pima County area is blessed with a rich and diverse trails heritage that few communities can match. That heritage dates back thousands of years to the ancient peoples who originally settled and occupied this area. They created and used trails for transportation, spiritual purposes, exercise, recreation, and even dispute resolution, with the winner of a running contest prevailing in the dispute.



The Spanish exploration of the region also contributed significantly to the area's trails heritage. Beginning with Coronado's early exploration of this area in the 1540s, the Spanish made major contributions to the area and its trails heritage. One significant figure was Juan Bautista de Anza, whose expedition, at the direction of the Viceroy of New Spain to establish the first overland route from Mexico into Alta California, resulted in the settlement of northern California and the creation of what is now the San Francisco Bay Area and the Presidio. Today, the Juan Bautista de Anza National Historic Trail commemorates the route of that historic expedition through Pima County.



Pima County's trails heritage continued with the modern settlement of the area in the 20th Century and the creation of large tracts of protected natural open space preserves, including the Coronado National Forest in 1903; establishment of the Tucson Mountain Park in 1929; and the Saguaro National Monument in 1933 and 1961 (later elevated to National Park status in 1994). Pima County's first formal recreational trails were located within these preserves.

Local trail advocates have been encouraging trail planning in Pima County since the late 1950s. The Southern Arizona Hiking Club, founded in 1958, signified a growing public interest in acquiring and protecting trail access to public lands. The 1970s saw the preparation of a *Trail Access Plan for Tucson*, which helped set the stage for more comprehensive projects to follow. Other groups, such as Pima Trails Association, founded in 1987, convinced the Pima County Board of Supervisors to provide funding for the creation of the *Eastern Pima County Trail System Master Plan* (EPCTSMP). This group recognized the Master Plan as a tool to help protect the community's recreational trails, which at that time were being lost to development at an alarming pace. The EPCTSMP was formally adopted in 1989, and updated in 1996. The EPCTSMP became the community's original model for the development

### A Good Trails Experience

Create a trail system that is more than just a way to get from one point to another; create a trail system that is a journey to enjoy

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of the interconnected regional trail system and the principal resource for the protection of trails heritage, not to mention the model for the development of an excellent regional trail system.

The new *Pima Regional Trail System Master Plan Update* (this document) provides the most current update to the 1996 EPCTSMP and will guide decision makers and planners as they move to aggressively secure needed resources and monies to continue providing trail facilities for the community. This new Master Plan will provide the community with a truly regional trail plan that encompasses the entire Tucson metropolitan area made up of Pima County, the cities of Tucson and South Tucson, and the towns of Marana, Oro Valley, and Sahuarita.



**One plans not  
places, or spaces, or  
things...one plans  
experiences..**

John Ormsbee Simonds  
in *Landscape Architecture*

## C. Purpose and Need

Pima County has changed considerably since the adoption of the original Master Plan in 1989. The population of Pima County has increased from approximately 600,000 in 1989 to in excess of 1,000,000 at the beginning of 2008.

New public land acquisitions are ongoing, in large part as a result of Pima County's adoption of the *Sonoran Desert Conservation Plan*. This plan was initiated in 1989 and, in December 2001, Pima County incorporated the *Sonoran Desert Conservation Plan* into its comprehensive land use plan. The proposed conservation land system encompassed 77,000 acres in eastern Pima County in 2008.

The 1996 EPCTSMP does not adequately address integration of the Master Plan between local jurisdictions. The planning process implemented and described later in this Master Plan addresses this need, and includes participation by all jurisdictions within the planning area.

The trail standards included in the 1996 EPCTSMP are incomplete and inadequate, due largely to the changing demographics and the phenomenal growth Pima County is experiencing. Today, the number of people using trails is greater than ever, generating a need for more trail space within existing corridors. The new Master Plan includes complete, up-to-date trail standards designed to meet the growing population and a multitude of needs. Adoption of these standards by all local jurisdictions will provide consistent development and improved safety along the entire regional trail system.





The 1996 EPCTSMP included a comprehensive inventory of traditional, non-motorized trail corridors intended to serve hikers, equestrians, and mountain bikers, and was accompanied by a wide range of recommendations regarding how the corridors could be secured to facilitate the development of an interconnected non-motorized regional system. The plan did not include information regarding the design of individual trail corridors, the growing need for multi-modal trail opportunities, integration of the regional trail system into Tucson's central core, or address a range of other matters presently considered important in the development of a regional trail system.

Some of these important matters include, first, that residents have identified a need to reduce automobile traffic thereby improving air quality and reducing global warming. Trails can help by providing opportunities for alternate modes of transportation within trail corridors. Second, trail development should be integrated with community conservation efforts. Lands acquired as part of the *Sonoran Desert Conservation Plan* provide significant opportunities to expand and improve the regional trail system while conserving valuable habitat and protecting the community's special and unique character.

New forms of trails-based recreational demand are resulting in the development of trails parks located close to where people live. Residents have expressed interest in trails as a community feature that enhances quality of life. They have demonstrated a willingness to pay for these features by approving bonding and other forms of funding (such as the Regional Transportation Authority (RTA) program, approved in May of 2006) to develop a regional trail system. A 1997 phone survey, conducted by AZ Opinion for the City of Tucson, also indicated residents' willingness to pay for outdoor green space that had community-wide benefits.

### D. Trends

The popularity of trails has been increasing for a long time and it appears it will continue to grow. For example, just over twenty years ago, a few abandoned rail corridors had been converted to long-distance trails; today, nearly 14,000 miles of rails-to-trails conversions are in service around the United States.

In an effort to understand the changing trail needs, a study of trends in trail development was conducted. Several cities were identified in the stakeholder kick-off meeting as possible "leading edge" trail planning



communities to contact. They included Boulder, Colorado; the state of Colorado; the state of Florida; Scottsdale, Arizona; Austin, Texas; San Diego County, California; Davis, California; and Indianapolis, Indiana. Six of these jurisdictions were contacted and a few of the trail planning trends implemented by these entities are provided below. A full report of the interviews is available from the City of Tucson Parks and Recreation Department.






### Grade-separated Roadway Crossings

In Boulder, Colorado, grade-separated crossings are built as a matter of course rather than the exception. The Boulder Plan includes trail/bikeway underpasses and overpasses as routine infrastructure improvements with 75 underpasses in-place, and an additional 95 grade-separated crossings planned. The City works with flood control and federal enhancement monies to fund their projects. Their trails are identified on their Comprehensive Trails Plan Map as well as their Web site. In addition to the City's Comprehensive Trails Plan Map, the city has also adopted a Greenways Master Plan that focuses on riparian corridors.



### Current Trail Issues

American Trails, a national trails advocacy organization, identifies five primary issues in trails planning, advocacy and development:

-  **Health.** Trails promote mental, social, spiritual, and physical fitness through everyday activities that can combat the current health crisis affecting our society.
-  **Community.** Trails help build “community” by creating a green infrastructure of trails and greenways in neighborhoods and new developments within 15 minutes of every American’s home or workplace. Local trail systems are being connected to regional, state, and national trail systems enhancing access to numerous local and regional destinations from schools to major employment centers.
-  **Active Transportation.** Trails provide alternative modes of travel that have the potential to carry a significant part of the transportation load and thereby lessen dependence on foreign oil and reduce CO2 emissions contributing to climate change, all while making the trail user healthier and more active.
-  **Youth and Trails.** Using trails help children develop life-long habits of good health. Sharing the pleasures of being on the trail is an important way to help children mature into adults who become good stewards of the land. Educational and recreational programming along trails provides constructive activities for children while bringing families together.
-  **Partnerships.** Trails funding, planning, construction, and maintenance are bringing together strategic partners representing agencies, different trail user groups, volunteers, developers, private landowners, utility companies, and businesses. These partnerships create a diverse coalition of stakeholders who value consensus building and sustainable long-term relationships.



**Application:** Boulder's willingness to routinely provide grade-separated crossings for their trail and bikeway improvements is a goal the Pima Regional Trail System Master Plan will try to achieve to decrease the number of at-grade roadway crossings by non-motorized users.



### GIS Data Bases

The state of Colorado is in the process of preparing a State Trails Master Plan which will include documenting over 40,000 miles of trails in a Geographic Information System (GIS) trails data base. The state is coordinating with multiple agencies including the USDA Forest Service, the Bureau of Land Management, and local entities to encourage cooperation among local cities, counties, and federal land management agencies.

**Application:** Pima County has begun collecting GIS alignments for many regional trails in the regional trails plan. The Pima Regional Trail System Master Plan promotes the incorporation of the entire regional trail system into a comprehensive GIS data base and encourages multi-jurisdictional input to the data base.

### Internet Based State Trail System

The state of Florida Department of Environmental Protection has developed the Cross Florida Greenway Trail. This innovative plan uses Internet technology to present information about the trail system to potential users. The State has over 6,000 miles of corridor identified. They view the state trails plan similar to the level of the interstate highway system, with state trails providing the main trail network, and regional, county, and city trail systems providing local linkages.

**Application:** The Pima Regional Trail System Master Plan promotes the incorporation of the entire regional trail system into the Pima County MapGuide Internet Web site.

### Customer Service

The city of Austin, Texas utilizes multiple technologies including global positioning system (GPS), GIS, and the Internet to increase efficiency in trail design within their community. The Austin City Park System includes 234 parks and over 50 miles of trails. All of the trails and parks information has been collected via GPS and entered into GIS by staff. The resulting GIS information is used by both staff and recreation users and includes database information from surrounding jurisdictions. Local homeowner associations, utilities, and the general public all share in this information. Austin city staff will make custom maps for customers



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on a walk-in and e-mail request basis and are continually updating the files so they are always current.

**Application:** The Pima Regional Trail System Master Plan promotes incorporation of the entire regional trail system into a comprehensive GIS data base and the incorporation of that database of the regional trail system into the Pima County MapGuide Internet Web site where it can be easily accessed and updated.

### **Alternate Modes**

The city of Davis, California may not be the first city to have a bike lane but they are the first to lay claim to it. Their bike system is 40 years in the making and boasts a 50/50 on-street/off-street network of bike lanes, with 15 to 18 percent of their commuters biking to work. The relatively flat terrain of the area, mild climate, and the network of bike paths and lanes contribute to the high number of bicycle commuters. Tucson and Pima County have the first two and are working toward the latter.

**Application:** The Pima Regional Trail System Master Plan promotes commuter use of the trail system by not only cyclists, but also by other non-motorized commuters such as in-line skaters, walkers, joggers, and users with physical disabilities. All trail users are encouraged to commute to work via the regional trail system.

### **Rails-to-Trails**

The city of Indianapolis, Indiana has one of the busiest and most popular rails-to-trails programs in the nation, boasting more than 1.3 million users last year. The Cardinals Greenway Rails-to-Trails system is an extensive, well designed, award winning, and well-established trail system that follows the old Monan rail line between Chicago and Indianapolis. Other trails in the city are mostly in greenways or along waterways. The city is also planning an east/west rails-to-trails project on an old PA rail line.

**Application:** The Pima Regional Trail System Master Plan includes the El Paso and Southwestern Greenway, formerly the El Paso and Southwestern Railroad right-of-way, the Esmond Station railroad bed on the old alignment of the Southern Pacific Railroad, and the newly designed CAP Trail, which follows the alignment of the Central Arizona Project Canal through Pima County. As abandoned rights-of-way are identified and made available, the Master Plan will continue to incorporate them into the regional trail system.



# What's New in Trails

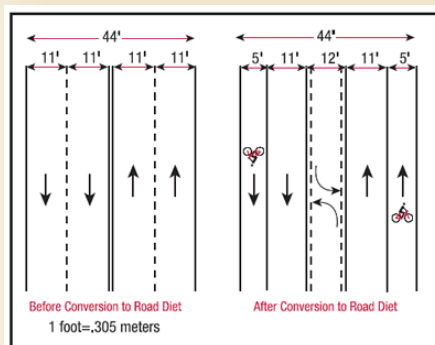


## Velo City - Toronto

Elevated bikeways are completely enclosed in tubes for all-weather cycling. Tubes are separated by direction to create dynamic air circulation, creating natural tail winds. The idea is actually not new. In 1965, New York City mayoral candidate William F. Buckley, Jr. proposed elevated bikeways running the length of Second and Seventh Avenues. It was called the 'Buckley Bikeway'.

## Land Bridge - Florida

The land bridge is a 52-foot wide, 200-foot long structure over Interstate 75. Specially designed structural beams support the weight of fieldstone walls and tons of topsoil for irrigated planters landscaped with native vegetation. The idea for the bridge came from the Netherlands, where similar wildlife overpasses are called "ecoducts."



## Road Diets

Road dieting is a term that developed in the late 1990s to describe narrowing wide streets to be leaner and more productive by reducing the number and width of vehicular lanes and adding bicycle and pedestrian facilities. The typical diet candidate is a four-lane road carrying 12-18,000 auto trips per day. They can also be roads that have safety issues, are essential bicycle routes, historic streets, and scenic roads. This is one more method to emphasize non-vehicular mobility and increased human health over the need to accommodate increasingly more vehicles.

## E. Benefits of Trails

Public trails have become increasingly popular over the past several decades, a trend borne out by surveys conducted in the preparation of parks and recreation master plans in this region and throughout the United States. They have become key elements of a community's quality of life and have proven themselves worth the investment. A 2001 survey of Omaha's recreational trails found that 81 percent of respondents felt the trail's proximity would have a positive effect or no effect on the ease of sale of their homes. 64 percent of respondents indicated that the trail positively influenced their decision to purchase their home (<http://flagstaffbiking.org/loop-trail/economic-benefits>).

In Casa Grande, the results of a survey for the city's 2008 Trail System Master Plan, indicated that "walking and biking trails" were the outdoor recreational facilities that respondents most wanted to see constructed in the community. Additionally, walking and biking trails were the facilities that the survey respondents were most willing to fund. There are many excellent reasons other than recreation for communities to make this investment, from improving residents' health and community air quality, to lessening the dependence on the automobile as a sole means of transportation. The following ten reasons, although not investigated in depth, begin to illustrate many of the benefits of a regional trail system for Pima County.

### Health and Exercise

Trails are great, low impact recreational opportunities that don't require special equipment to use and enjoy. They provide great opportunities to get out and exercise, contributing to the community's fitness and health. This is particularly important as the area's population continues to have issues with weight control, childhood obesity, and related diseases. A few minutes or a few hours on a recreational trail helps relieve the stresses of modern life. Trails offer terrific opportunities to spend quality time and interact with family members, friends, and neighbors. In an increasingly busy world with seemingly endless demands, trails provide an important mechanism to re-connect with the most important people in everyone's lives through recreation.

### Health and Exercise

Although some health benefits seem to begin with as little as 60 minutes (1 hour) a week, research shows that a total amount of 150 minutes (2 hours and 30 minutes) a week of moderate-intensity aerobic activity, such as brisk walking, consistently reduces the risk of many chronic diseases and other adverse health outcomes. (2008 Physical Activity Guidelines for Americans, US Dept. of Health and Human Services)

### Benefits of Trails

-  Health and Exercise
-  Experience Nature
-  Reduce Automobile Use
-  Quality of Life
-  Enhance Natural Habitats
-  Natural Buffers
-  Preserve and Interpreting History
-  Increase Property Value
-  Promote Economic Development
-  Promote Tourism





### **Healthy Air**

Motor vehicle emissions represent 31 percent of total carbon dioxide, 81 percent of carbon monoxide, and 49 percent of nitrogen oxides released in the U.S. (*The Green Commuter, a publication of the Clean Air Council*). A short, four-mile round trip by bicycle keeps about 15 pounds of pollutants out of the air we breathe. (*WorldWatch Institute*) (*League of American Bicyclists*)

### ***Experiencing Nature***

Trails make it possible for people to experience firsthand the wonders of the natural world. Backcountry trails take users to places with incredible views and natural features not found anywhere else. As such, they're a gateway to another world. They provide an outdoor classroom, offering opportunities to teach respect and appreciation about the natural and cultural worlds, and develop stewardship of the natural environment. A well-planned and sensitively designed trail system can provide opportunities for the public to enjoy and learn about the protected open space their tax dollars help protect and, in the process, develop a constituency for the conservation of natural landscapes.

### ***Reduction in Automobile Use***

Trails offer opportunities to get from one place to another without using an automobile. A well-developed pathway system will provide all-weather paved access for commuter bicyclists, roller bladers, and hikers wishing to reach their places of employment or do their shopping. Encouraging people through education and outreach to get out of cars and find other ways to get to their destinations lessens pollution and improves air quality. Trails are important elements of Safe Routes to School programs, allowing students to bicycle and walk safely between their homes and schools, off-street and out of traffic's way. They also provide a safe means for both younger and older citizens to enjoy bicycling and walking away from the dangers of on-street traffic.

### ***Quality of Life***

Trails enhance a community's livability and its quality of life. The Pima Regional Trail System has become part of our unique "brand" as a community, helping to make the region well known around the state and beyond. It has become part of what makes Pima County and its municipalities unique and special.

### ***Enhancing Natural Habitats***

The development of trail corridors and greenways can encourage the restoration of natural wash corridors associated with trails and help create valuable habitat for wildlife in areas where such wildlife didn't exist, or was severely constrained.



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### ***Natural Buffers***

Trail corridors can provide a natural buffer between sensitive and critical habitats and rapidly encroaching development. They provide land managers a tool for directing public access around, and sometimes through, sensitive and critical habitats in a way that allows the public to enjoy these resources without damaging them. In urban areas, integrating



### ***Preserving and Interpreting History***

The development of trails in certain historic corridors helps protect these corridors and their significance to the community. Local examples include: the 230-year old Juan Bautista de Anza National Historic Trail along the west bank of the Santa Cruz River; the 100-year old El Paso and Southwestern Rail Corridor, which will become a downtown greenway instead of just another paved road; and the Esmond Station Rail Corridor on Tucson's far east side, home to the worst rail disaster in the history of Arizona.

### ***Increased Property Value***

Research has shown that living in the vicinity of a recreational trail, such as a river park or greenway, can increase property values in the area, in some cases up to six percent more valuable, depending on the property's proximity to the trail corridor.

#### **Increased Property Value**

57 percent felt that living near a trail would make their homes easier to sell (*The Effect of Greenways on Property Values and Public Safety, Colorado State Trails Program, 1994*)

### ***Promote Economic Development***

Top employers know that communities with outstanding recreational trail opportunities offer higher quality of life, making it easier for them to attract and retain well-qualified personnel. A great trail system enables economic development authorities to "sell" the community to potential employers, making Tucson and the surrounding communities more competitive in the global market.

#### **Promote Economic Development**

The National Park Service report indicated that San Antonio's Riverwalk accounted for \$1.2 billion in annual spending (*Economic Values of Greenways, Trails, and River Protection, National Park Service 1990*)

### ***Promote Tourism***

Trails are a proven tourism draw. Tucson's incredible year-round weather and unique natural setting have drawn international tourists to this area for decades. Most of the once famous "dude" ranches have given way to world-class resorts. Several of the areas top resorts are located adjacent to hiking routes in the Catalina, Rincon, Tucson, and Tortolita mountain ranges that ring the Tucson basin. Many of these resorts cater



to eco-tourists and offer activities that include horseback trail rides, mountain biking, hiking, trail running, and more.



### F. Planning Process

The commitment of the jurisdictions participating in the planning process to transparency and thorough public participation led to the development and execution of an extensive public participation process for the update to the *Pima Regional Trail System Master Plan*. The public participation process included the following key elements:

#### *Core Planning Team*

The first step taken in the planning process for this document was the creation of a Core Planning Team consisting of the Trails Coordinator from the City of Tucson Parks and Recreation Department, the Trails Coordinator from the Pima County Natural Resources Parks and Recreation Department, and the consulting team of HDR Engineering, Inc., Coffman Studio, L.L.C., and McGann & Associates, Inc. The team's responsibilities included overall project coordination and planning. The Core Planning Team met for the first time in June of 2007 and then on an ongoing basis until the planning process was completed.



#### *Project Advisory Group*

A Master Plan Advisory Group was selected to assist with technical input and direction, and to provide overall project review in the planning process. The Advisory Group consisted of the Core Planning Team along with the bike and pedestrian coordinators from the City of Tucson, Town of Oro Valley, and Pima County Departments of Transportation, as well as representatives from Town of Oro Valley Parks and Recreation, Pima Trails Association, Urban Trails Coalition, Tucson Urban Planning and Design, the Tucson Office of Conservation and Sustainable Development, Pima County Planning, the National Park Service, Bureau of Land Management, U.S. Forest Service, U.S. Bureau of Reclamation, the Southern Arizona Hiking Club, the Sonoran Desert Mountain Bicyclists, Tucson Clean and Beautiful, Tucson Saddle Club, County Line Riders, and the Tucson Inline Sk8 Club. The Advisory Group met for the first time in the summer of 2007, reviewed the draft in the summer of 2009, and met in the fall of 2009.

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### ***Project Focus Groups***

Special focus groups were identified to solicit input from a wide cross-section of trail users including: river park users; equestrians; mountain bikers; trail runners; urban core users; users with physical challenges, and hikers. A focus meeting was held with each of these user groups over a three-month period. In addition, a series of working group meetings were held with members of the trail-using public, parks, and trail planners from the local jurisdictions, and a number of federal and state agency representatives to solicit special assistance in updating the Master Plan's Trails Map.



### ***Planning Group***

A special Planning Group, made up of professional planners from various City of Tucson departments, met in August and November of 2007, and January 2008, to deal specifically with the special challenge of retrofitting trails into Tucson's central core. City department representation included: Office of Conservation and Sustainable Development, Department of Transportation, Development Services, Urban Planning and Design, and Parks and Recreation.

### ***Public Meetings and Coordination with Other Jurisdictions***

A series of three public open houses was held in October of 2007 at different locations within the City of Tucson (Southwest Metro, Northwest Metro, and Midtown Metro). Local citizens were invited to attend and provide input on any subject of trails-related interest. The meetings were announced via fliers and a press release.



After a draft of the Regional Trail System Map was completed, an additional public open house was held in the November 2009 to present the draft *Pima Regional Trail System Master Plan*. Comments related to the Draft Master Plan were solicited. Adjustments to the plan were made based on the input received. The meeting was announced via fliers and a press release.

Presentation of the final *Pima Regional Trail System Master Plan* was made to the Parks and Recreation Commissions of each of the local jurisdictions in eastern Pima County in late 2009.

The final *Pima Regional Trail System Master Plan* was presented to the elected officials from Pima County, the cities of Tucson and South



Tucson, and the towns of Marana, Oro Valley, and Sahuarita in late 2009.



### *Document Review*

In the preparation of the Pima Regional Trail System Master Plan, a wide range of other connected adopted planning documents were reviewed to ensure consistency. The planning documents reviewed include:







- *Fantasy Island Master Plan*
- *Houghton Area Master Plan*
- *City of Tucson Parks and Recreation Ten-Year Strategic Service Plan*
- *Urban Landscape Framework*
- *Oro Valley Trails Task Force Report* (2002)
- *Pima-Tucson Trails: The Next Five Years* (1992)
- *Pinal County Trails Plan* (2005)
- *Rincon Valley/Southeast Subregional Plan* (2004)
- *Rincon Valley Subregional Trails Plan* (1998)
- *The El Paso & Southwestern Greenway Master Plan* (2005)
- *Growth and Development in Southeast Tucson* (2004)
- *U.S. Army Corps of Engineers plans – Tres Rios del Norte* (2006)
- *U.S. Army Corps of Engineers plans – Santa Cruz River, Paseo de las Iglesias Final Feasibility Report* (2006)
- *Town of Marana Transportation Plan* (from the 2003 General Plan)
- *Green Valley Community Plan*
- *Sahuarita 2002 General Plan, Recreation and Open Space Element*

- *Sahuarita 2008 Parks, Recreation, Trails and Open Space Master Plan*

Document review notes are attached in Appendix A-4 of this report.



### **Major Issues Identified by the Public**

-  Retrofitting the Tucson Central Core
-  "Trailsportation"
-  Consistent Trail Standards
-  Creating New Opportunities
-  Access
-  Accessibility



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## G. Major Issues Identified by the Public

Using information gathered during the planning process, the Core Planning Team categorized the comments received into the following major issues (presented here in no particular order):

### *Retrofitting the Tucson Central Core*

Comments from the public consistently state the Master Plan needs to retrofit the existing regional trail system into the Tucson central core by providing a system of trail connections from existing residential neighborhoods, employment centers, schools, city parks, and commercial areas located within the City of Tucson, and extend them to the existing regional trail network surrounding the city. This “gap” was apparent in the most recent plan, the 1996 EPCTMP.

#### **Public comments received on this topic**

“More trails in the urban core...few trails in Tucson”

“Opportunity to access and enjoy trails in a natural resource setting close to home”

### *“Trailsportation”*

The term “trailsportation” has been coined by authors of this plan to encompass two regional trail planning needs. The first is the need for the trail system to accommodate the widest possible range of uses and users. The second is the need to develop a trail system that is integral to the community’s infrastructure by providing opportunities to move through the community without an automobile. “Trailsportation” incorporates both of these needs with an extensive system of paved paths and unpaved trails, located within common trail corridors, and designed to accommodate the widest cross-section of users possible, while connecting them to parks, schools, residential neighborhoods, shopping and entertainment areas, employment centers, regional destinations, neighboring communities, and natural and preserve areas.

#### **Public comments received on this topic**

“River Park accommodation of all users, particularly horses on top of the bank”

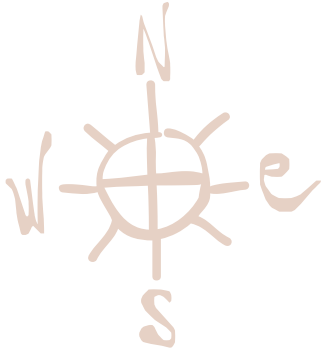
“Make regional trail system a part of the metro green infrastructure system”

“Develop a true “alternate modes” system that does not put people in traffic”

“Opportunities to ride bikes away from traffic – a functional regional



shared-use path system throughout the community”



### ***Consistent Trail Standards***

The public identified the need to develop trails consistently throughout the region. The Master Plan should include one set of development standards that identifies all trail types, trail access, trailhead design, trail and pathway widths, trail corridor widths, construction materials, and signage. One set of common standards should be developed and utilized by all jurisdictions.

#### **Public comments received on this topic**

“Trail standards—need to have them, and shared by all...”

“Uniformity of the regional trail system---path widths and signage, etc.”.

“Signage and trail markers needed everywhere”.

### ***Creating New Opportunities***

The Fantasy Island Trails Park was the first trails park in the region and was the result of a grass-roots effort to preserve a popular mountain biking area located close to where local users lived. It proved so popular, there are more trails parks proposed throughout the metropolitan area in this plan. Trails parks are just one of the opportunities noted to improve the trail system. Others included:

#### **Public comments received on this topic**

“Trail corridors—all of them—on Map Guide”

“Better maps – have a map for the whole system available to the whole community”

“Land bridge for the CAP Trail”

“Dedicated equestrian parks”

“Trails on all non-sensitive open space owned by the public—particularly ranch conservation areas, mountain parks, and more”

“More singletrack trails, particularly in natural resource areas”

### ***Access***

Public input has emphasized the Pima Regional Trail System needs to be designed to provide safe and convenient access from neighborhoods, employment centers, schools, and commercial shopping areas to the regional trail system.





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**Public comments received on this topic**

"Finish Anza Trail", "Finish Arizona Trail", "Develop CAP Trail"

"Access to public lands"

"River parks need to be more substantial---wider and greener"

"Invest in infrastructure where needed to resolve connectivity issues"

"More trailheads and better access to local, state and public lands around Tucson"

"The UA athletes would really like it if we could complete the "core loop" around the metro area. They would definitely use it"

"Need more trails (per trail runners, equestrians, mountain bikers, hikers in public mtgs.)"

"Acquiring rights-of-way"



***Accessibility***

Public input indicated the regional trail system should provide safe and convenient access to the regional system for the widest range of users possible, including those with physical challenges.

**Public comments received on this topic**

"ADA compliance"

"More trails opportunities for physically-challenged users – more Feliz Paseos type parks"

"The UA athletes use the river park system, the David Bell bike path at Reid Park, the Old Spanish Trail Bicycle and Pedestrian Path, and pathways in Marana and Oro Valley for training purposes. All are usable for their purposes, even though the David Bell path at Reid Park gets crowded at times, making it hard to use"

"Having water and restroom facilities at the trailhead access points of the river parks and pathways system would be helpful for wheelchair users"

"Picnic areas would also be used, and need to be modified to ensure ADA accessibility"

"The wheelchair users are pleased that the "walking against traffic" pattern that was recently discontinued on the Rillito pathway is no longer in use. It was confusing for pathway users and caused problems"

"Having more maintenance to keep glass, dirt, and rocks off the path system would be helpful (glass is particularly a problem on the Aviation bike path). The tires on the competition chairs are a bit delicate and cost \$70 each, and are easily punctured. Potholes



## BACKGROUND



are also a significant impediment for wheelchair-based pathway users. It was suggested to install signs that would encourage users to “report potholes” to help speed up maintenance activities”

“One problem occasionally encountered along the Santa Cruz corridor is wild dogs...they sometimes chase the chair users”

“Having the asphalt mix on the river park system be as smooth as possible would be preferred by chair users. Rougher mixes are harder on tires and users, and less enjoyable to use”

“The greater the width of the pathways, the better. Provides more room for all users, and is safer. Wheelchair users like the Divided Urban Pathway cross-section...helps eliminate conflicts and creates a nicer river park corridor”

“Consider creating accessible park nodes along the river park system, such as basketball courts that can be used by wheelchair users with runoff areas or aprons behind the basketball poles and short fences that can catch the balls so they don’t have to be chased down”

“Avoid allowing thorny trees in close proximity to the river park... branches from these trees get on the pathway occasionally and can puncture tires”

“Install more signs suggesting that pedestrians stay to the right. When chair and bike users approach a pedestrian and warn them of the approach by saying “on your left,” the pedestrians tend to move or jump left, which can cause a conflict”

“The underpasses under bridges on the Rillito are narrow and dangerous...wider underpasses, and maybe mirrors where indicated, would be appreciated and make them safer, as would better signage that said “slow” or “caution”

“A speed limit might be helpful to keep speeding cyclists from causing conflicts. Consider “control your speed” signs in lieu of speed enforcement”



# System Features

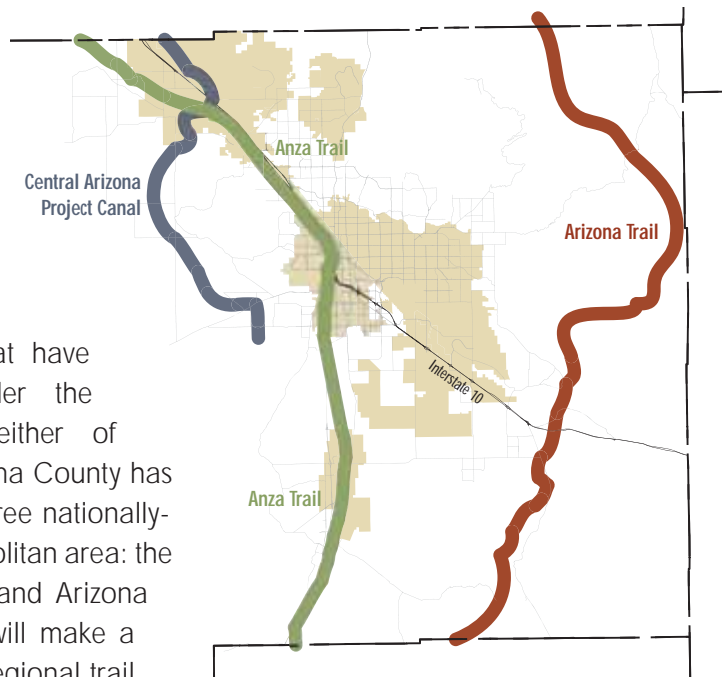
## In this chapter

Descriptions of features that make the  
Pima Regional Trail System exceptional

### A. The Regional Trail System Features

Pima County, Tucson, South Tucson, Marana, Oro Valley, and Sahuarita all have bragging rights to some of the most beautiful scenery in the country. There are many aspects and elements in the region that combine to create a unique setting for trails that is found in few other places. They include:

- Three Trails of National Significance
- A trails loop that surrounds the central city core
- Thousands of acres of preserve areas with multiple trails
- A shared use system
- Year round access



#### *Trails of National Significance*

Trails of National Significance are trails that have received formal national recognition under the National Trails System Act (P.L. 90-543) as either of historic, scenic, or recreational importance. Pima County has something that few communities can boast: three nationally-significant trails in close proximity to the metropolitan area: the Anza Trail (historic), CAP Trail (recreational), and Arizona Trail (scenic). The completion of these trails will make a major contribution to the development of the regional trail system.

#### **Arizona Trail National Scenic Trail**

Arizona's preeminent long-distance scenic trail is the Arizona Trail, a non-motorized, shared-use trail that has been under development since 1985 and received National Scenic Trail designation in March 2009. Originally the dream of Flagstaff teacher and hiking enthusiast Dale Shewalter, the trail stretches nearly 800 miles across Arizona, from Utah to Mexico. The Arizona Trail is intended to be a primitive, long distance trail that highlights the state's topographic, biologic, historic, and cultural diversity.

#### **National Trails System Act**

The 1968 National Trails System Act (P.L. 90-543) created the National Trails System to provide outdoor recreation opportunities and to promote the preservation of access to the outdoor areas and historic resources of the nation. There are four categories of trail: recreation, scenic, historic, and connecting (side) trails.



## SYSTEM FEATURES

The trail's primary users are hikers, equestrians, and mountain bicyclists (outside of wilderness or other specially managed areas), but opportunities will also exist for cross-country skiers, snowshoers, joggers, and pack stock users. The trail is made up of 43 "Passages" from 11 to 35 miles in length. As of late 2007, more than 750 miles had been signed and were open to the public.



In Pima County, the Arizona Trail passes through land of several agencies, both federal and county: the Santa Catalina Ranger District of the Coronado National Forest (65 miles); Saguaro National Park (four miles); unincorporated Pima County; Colossal Cave Mountain Park; the Cienega Creek Natural Preserve; the proposed Santa Rita Mountain Park; and the Nogales Ranger District of the Coronado National Forest. In June of 2004, the Pima County Natural Resources, Parks and Recreation Department purchased 21.2 miles of perpetual right-of-way for the Arizona Trail from the southern boundary of Saguaro National Park to the Lakes Road in the foothills of the Santa Rita Mountains. Construction on this segment of the trail was initiated and called the Cienega Corridor Construction Project. From the fall of 2004 through the spring of 2008, 27 miles of trail were constructed using entirely volunteer labor. Other plans that reference the Arizona Trail are: *Arizona Trail Management Plan (Arizona State Parks, 1995)*, *1997 Pima County Bond Program (1997)*, *Pima County Comprehensive Plan (2001)*, and *Pima Regional Trails Plan (2008)*.



### Central Arizona Project (CAP) National Recreation Trail

A trail along the Central Arizona Project canal was first envisioned by Pima County Parks and Recreation in the mid-1980s, which led to the execution of a 50-year recreational development agreement between Pima County and the Bureau of Reclamation, the developer of the canal, in 1986. Since that time, the trail's first trailhead facility has been constructed at the corner of Sandario and Mile Wide roads and another trailhead will be constructed a short distance north of Tangerine Road in 2009.

A master plan for the 60-mile segment of the CAP Trail that passes through Pima County was initiated in 2002, but was placed on hold when issues arose between Pima County and the Central Arizona Water Conservation District (CAWCD) about where the trail will be located. Pima County's preference is to have the trail located on top of the CAP's protection dike, to take advantage of the already-constructed natural surface "trail" there and the expansive views it provides. This trail option



is capable of supporting the vehicles used in routine canal surveillance. The CAWCD would prefer to keep trail users on the western “downslope” side of the canal, which is considerably less desirable from a scenic and quality-of-experience perspective. The CAP Trail Master Plan was completed in 2009, and implementation of the trail will begin when the CAWCD agrees to site the trail on top of the protection dike.

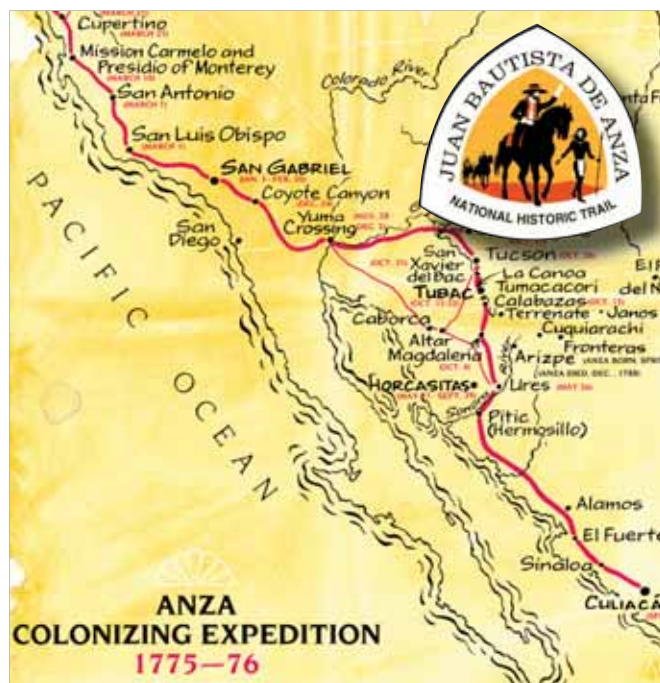
The CAP Trail was designated as a National Recreation Trail by the U.S. Secretary of the Interior in 2003. Other plans that reference the CAP National Recreation Trail are: *Pima County Comprehensive Plan (2001)*, *CAP Trail Master Plan (Pima County (2009)*, and *Pima Regional Trail System Master Plan (2008)*.

### Juan Bautista de Anza National Historic Trail

Pima County's most important historic trail route is the Juan Bautista de Anza National Historic Trail, which passes through Pima County on the west side of the Santa Cruz River. The trail is named for Spanish explorer and military officer Juan Bautista de Anza and commemorates the 1,200-mile overland route he followed in 1775-76 while leading an expedition to establish a presidio and mission at what is now San Francisco Bay. The Anza Trail was designated a National Historic Trail by the United States Congress in 1990.

Development of the Anza Trail has been underway in Pima County since then. In the Tucson metropolitan area, the trail coincides with existing segments of the Santa Cruz River Park, although those segments need to be expanded to the divided urban pathway configuration to properly accommodate the Anza Trail, which requires its own ten-foot wide natural surface path according to the Board of Supervisors-adopted Anza Trail Master Plan. The existing segments of the Santa Cruz River Park along the west bank have been fitted with “Juan Bautista de Anza National Historic Trail” signs.

Development of the Anza Trail and related facilities is also underway in the Green Valley area. In 2007, a five-mile segment of the trail was finished on Pima County's historic Canoa Ranch property, as a result of a federal Transportation Enhancements (TE) grant administered by





ADOT. In addition, a bridge was constructed over Drainageway #7 on the Haven Golf Course in 2006 adding to the trails continuity. Also in 2006, a new trailhead was constructed along the east side of Abrego Drive in the northeast corner of the Santa Rita Springs development. Pima County Parks, Real Property and Cultural Resources staff are presently working to assemble a corridor more than ten miles in length for the Anza Trail in the Green Valley area using easements and fee property dedicated or acquired since the early 1960s, and intend to develop a continuous segment of the Anza Trail through the Green Valley and Sahuarita area. Other plans that reference the Anza Trail are: *Pima County Comprehensive Plan (2001)*, *Juan Bautista de Anza National Historic Trail Master Plan (Pima County, 2004)*, and *Pima Regional Trail System Master Plan (2008)*.

### *The Loop*

The Pima Regional Trail System includes a framework of significant trail corridors that include the Santa Cruz, Rillito, and Pantano River parks, the Houghton Road Greenway, and the Julian Wash Greenway. These five interconnected corridors form a continuous “Loop” surrounding the City of Tucson’s central core. Many of the trails within the Pima Regional Trail System connect either directly or indirectly to the “Loop.” Each of the five trail corridors that form the “Loop” include a path and trail. The

Santa Cruz, Rillito, and Pantano River parks include a path and trail on both sides of the river where possible.



#### **Santa Cruz River Park**

Path and trail both sides.

#### **Rillito River Park**

Path and trail both sides.

#### **Pantano Wash**

Path and trail both sides.

#### **Houghton Road Corridor**

Path and trail east side of road.

#### **Julian Wash Greenway**

Path and trail south side of wash from Santa Cruz River to Wilmot Road then



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east on the north side of the wash to Rita Road, then to Houghton Road. From Santa Cruz River to Kino Parkway, there is a trail on the north side of the wash.

### ***Trails in Natural Resource Areas***

Pima County's first recreational trails were located within the community's protected open space preserves, the creation of which dates back to the early 1900s with the establishment of the Coronado National Forest in 1908. Tucson and Pima County are fortunate that open space conservation occurred in earnest in the region in the 20th Century, because it set the stage for an extensive and varied trails network. Tucson was inducted into the American Hiking Society Trail Town USA Hall of Fame in 1996 and has been a League of American Bicyclists Gold Level Bicycle Friendly Community since 2004. Visitors come from around the world to enjoy the scenery and trail opportunities in the Coronado National Forest, Tucson Mountain Park, Saguaro National Park, Catalina State Park, and more. These preserves have become a key element of the quality of life for area residents.

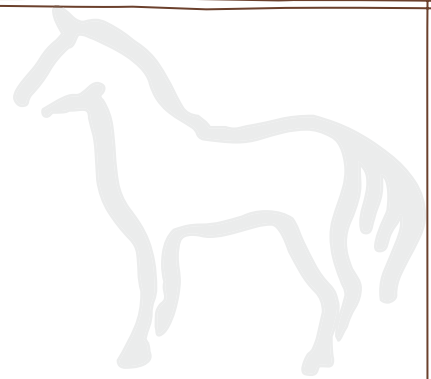
### **Natural Resource Areas with Existing Trails**

#### **Catalina State Park**

The 5,511-acre Catalina State Park is located in the western foothills of the Santa Catalina Mountains within the boundaries of the Coronado National Forest. The Park, managed by Arizona State Parks in cooperation with the National Forest Service, offers approximately 12 miles of trails open to hikers, equestrians, and mountain bikers. The park is a special favorite of horseback riders and includes an equestrian center with horse rig parking, a corral, and other equestrian facilities. The 8-mile long, 50-Year Trail begins in the park, as do the Sutherland and Romero Canyon trails, which provide access to the forest's Santa Catalina Ranger District trail system and the Pusch Ridge Wilderness Area.

#### **Cienega Creek Natural Preserve**

The 4,151-acre Cienega Creek Natural Preserve, located approximately 25 miles southeast of Tucson, was established by Pima County in 1986 to protect the creek's sensitive and increasingly rare riparian ecosystem, as well as to promote natural aquifer recharge and provide flood protection for downstream Tucson. The Preserve will continue to expand, per the 1994 management plan, using funding from the Pima County Regional Flood Control District and future Pima County Open Space Bond programs.





A management plan prepared for the Cienega Creek Natural Preserve in 1994 identified a number of possible new trail alignments. To date, the only formal trail that has been developed is the Arizona Trail, which was sited through the Preserve in 2001-2002 and constructed in 2004-2005 as a part of the Arizona Trail Cienega Corridor Construction Project. Public access into the Preserve is carefully controlled to help protect its pristine riparian characteristics. Up to 50 hikers per day are allowed into the Preserve with a permit secured from the Pima County Natural Resources, Parks and Recreation Department. Arizona Trail users are allowed to pass through the Preserve without a permit. Three trailhead facilities presently exist at the Preserve: a primitive access point at the northern end of the Preserve immediately south of Colossal Cave Road; the Davidson Canyon Trailhead located approximately 1,800 feet west of Cienega Creek south of Marsh Station Road; and the Three Bridges parking area located at the northwest corner of the Cienega Creek and the historic 1921 Marsh Station Road Bridge. Other plans that reference Cienega Creek Natural Preserve are: *Cienega Creek Management Plan (1994)*, *Pima County Comprehensive Plan (2001)*, *Sonoran Desert Conservation Plan (2001)*, and *Pima Regional Trail System Master Plan (2008)*.

### Colossal Cave Mountain Park

Colossal Cave has been a recreation destination for both local residents and visitors since the late 1800s, and has been a formal County mountain park since 1991. The park is best known for the tourist attraction from which it draws its name, but this very scenic 2,200-acre property also offers outstanding recreational trail opportunities for hikers, mountain bikers, and equestrians. The park's primary trail feature is its three-mile long segment of the Arizona Trail, which was constructed in 2005-2006 and passes through the park on a north-south alignment. A network of equestrian trails, most constructed over time by the park's horseback ride concessionaire, also exists and is in need of rerouting and maintenance. Other plans that reference Colossal Cave Mountain Park are: *Pima County Comprehensive Plan (2001)*, *Sonoran Desert Conservation Plan (2001)*, and *Pima Regional Trail System Master Plan (2008)*.



### Coronado National Forest

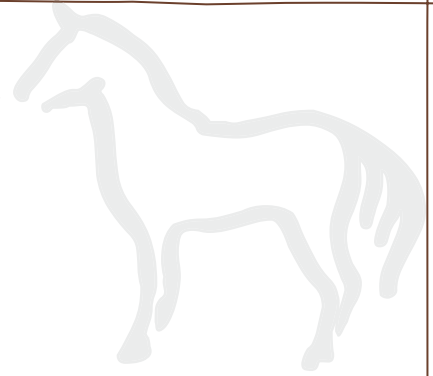
Southern Arizona is home to one National Forest, the 1,792,000-acre Coronado National Forest. The forest, named for the Spanish explorer Francisco Vasquez de Coronado, consists of five ranger districts, two of which are located in Pima County—the Santa Catalina and Nogales ranger districts.



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The 262,000-acre **Santa Catalina Ranger District**, situated immediately north and east of Tucson, is the Forest's smallest unit, but attracts its largest number of visitors because of its immediate proximity to Tucson. The District encompasses the Santa Catalina Mountains, including 9,157-foot Mount Lemmon and a large portion of the Rincon Mountains. The District is home to more than 400 miles of backcountry roads (195 miles) and trails (212 miles) open to hikers, equestrians, mountain bikers, and, in some areas, off-highway vehicle enthusiasts. Highlights of the District include a 65-mile section of the Arizona Trail; the hiking trails in the front range of the Catalinas and Rincos (Pima Canyon, Finger Rock, Pontatoc, Ventana, Milagrosa and Agua Caliente canyons); the Sabino Canyon Recreation Area; Redington Pass (a favorite riding area for mountain bicyclists); and numerous high country trails such as the Aspen Draw, Butterfly, and Marshall Gulch.



The Santa Catalina Ranger District is served by several Pima County-managed trailhead parking facilities (Pima Canyon, Finger Rock, Ventana), which is representative of the access partnership that exists between the Forest Service and Pima County Natural Resources, Parks and Recreation Department. Other plans that reference Coronado National Forest Santa Catalina Ranger District are: *Coronado National Forest Management Plan (2005)*, *Pima County Comprehensive Plan (2001)*, *Sonoran Desert Conservation Plan (2001)*, and *Pima Regional Trail System Master Plan (2008)*.

The 370,000-acre **Nogales Ranger District**, the Coronado National Forest's third-largest unit, is located south of Tucson and encompasses most of the Santa Rita Mountains. Its backcountry roads (350 miles) and trails (125 miles) offer excellent opportunities for hikers, equestrians, and mountain bikers. The Nogales Ranger District is home to the Elephant Head mountain bike route, which begins southeast of Mount Hopkins and winds around the western Santa Rita Mountains foothills to Madera Canyon, and a key segment of the Arizona Trail, which passes through Kentucky Camp, an abandoned mining settlement established in the late 1800s. The Nogales District portion of the Arizona Trail is presently unfinished. Approximately 11.5 miles remains to be constructed between the Lakes Road on State Trust Land, about three miles outside the Forest, and Oak Tree Canyon, within the Forest. Construction of this key segment is slated to occur in 2008-2009. Other plans that reference Coronado National Forest Nogales Ranger District are: *Coronado National Forest Management Plan (2005)*, *Pima County Comprehensive Plan (2001)*,



*Sonoran Desert Conservation Plan (2001), and Pima Regional Trail System Master Plan (2008).*

### **Empire-Cienega Resource Conservation Area**

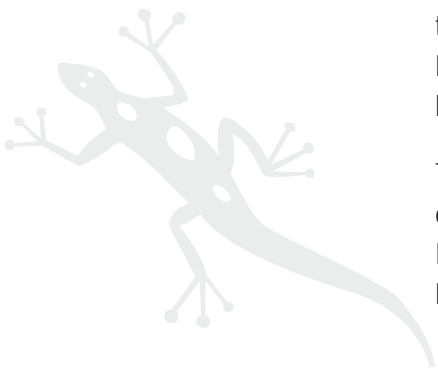
The Empire-Cienega Resource Conservation Area is a 42,000-acre preserve located in southeastern Pima County, south of Interstate 10 and east of State Highway 83 and approximately 50 miles from Tucson. The Resource Conservation Area (RCA) is located within the 142,800-acre Las Cienegas National Conservation Area (NCA), which was established on December 6, 2000. Both the RCA and NCA are managed by the Tucson Field District Office of the U.S. Bureau of Land Management.

The RCA/NCA is home to the historic 19th Century Empire Ranch, and encompasses the rolling grasslands of southeastern Pima County and a segment of Cienega Creek, as well as a number of trails listed on the original *Eastern Pima County Trail System Master Plan*. Other plans that reference Empire-Cienega Resource Conservation Area are: *Coronado National Forest Management Plan (2005)*, *Sonoran Desert Conservation Plan (2001)*, *Pima Regional Trail System Master Plan (2008)*, and *Empire-Cienega Resource Conservation Area Management Plan (2004)*.

### **Ironwood Forest National Monument**

The Ironwood Forest National Monument was created by Executive Order in May 2000 by President Clinton. It encompasses approximately 129,000 acres of Sonoran Desert land northwest of Tucson and west of the Avra Valley, and includes portions of the Silverbell, Waterman, Roskrige, and Sawtooth mountain ranges. The concept for this preserve was developed by the planning staff of the Pima County Natural Resources, Parks and Recreation Department, and is administered by the U.S. Bureau of Land Management. The monument's resources are significant and include mountains ranging from 1,800 feet to 4,200 feet in elevation and archeological resources listed on the National Register of Historic Places. Several endangered and threatened species live in the monument, and the desert bighorn sheep living in the region are the last viable population indigenous to the Tucson basin. Ragged Top Mountain, a regional landmark and favorite hiking destination, is the biological and geological crown jewel of the Monument.

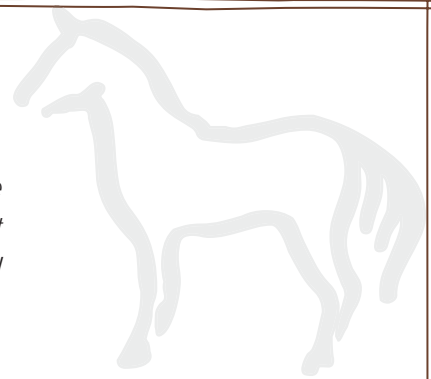
The Park has an existing system of backcountry roads and trails that are open to hikers, mountain bikers, and equestrians. The creation of the Ironwood Forest National Monument provided the impetus to extend the Regional Trail System through the Avra Valley and to the eastern edge of



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the Preserve, subsequently connecting the monument and its trail system to the rest of the Tucson metropolitan area. Other plans that reference Ironwood Forest National Monument are: *Pima County Comprehensive Plan (2001)*, *Sonoran Desert Conservation Plan (2001)*, *Ironwood Forest National Monument Management Plan (2008)*, and *Pima Regional Trail System Master Plan (2008)*.



### **Saguaro National Park**

Saguaro National Park was established as a National Monument by President Hoover in 1933 and was upgraded to National Park status by Congress in 1994. The park consists of two units located approximately 30 miles apart: the 67,293-acre Rincon Mountain District on the east side of the Tucson Basin and the 24,034-acre Tucson Mountain District on the west side of the metro area. A new General Management Plan has been prepared for the Park that will include trails plans for both districts.

The **Rincon Mountain District**, home of the park's administrative headquarters, takes in most of the Rincon Mountains. In 1976, Congress designated 57,930 acres of the district as federally-designated wilderness area. The Rincon Mountain District presently offers over 100 miles of recreational trails for hikers and equestrians, some of which begin on the desert floor and climb high into the Rincon Mountains (the Douglas Spring and Tanque Verde Ridge trails). A two and one-half-mile section of the Cactus Forest Trail inside the District's paved loop drive is accessible to mountain bicyclists and was the first shared-use single-track trail open to mountain bikes in any U.S. National Park. The Arizona Trail passes through the backcountry of the park. Its southern end will be relocated to connect with the northern end of Pima County's section of the trail, which has been constructed to the southern border of the park's east expansion area. Other plans that reference Saguaro National Park Rincon Mountain District are: *Pima County Comprehensive Plan (2001)*, *Sonoran Desert Conservation Plan (2001)*, *Pima Regional Trails Master Plan (2008)*, and *Saguaro National Park General Management Plan (2008)*.

The **Tucson Mountain District**, established by President Kennedy in 1961, abuts the northern edge of Pima County's Tucson Mountain Park and offers approximately 50 miles of trails for hikers and horseback riders. Mountain bikers are presently confined to the District's system of dirt roads. The Pima County-maintained El Camino del Cerro Trailhead provides access to the park's popular Sweetwater Trail.



### **Santa Rita Experimental Range**

The Santa Rita Experimental Range was created in 1903 and was administered by the U. S. Forest Service until 1987 when the management of the property was transferred to the University of Arizona College of Agriculture. The Range is located approximately 35 miles south of Tucson at the northwestern corner of the Santa Rita Mountains, and consists of 53,159 acres of Arizona State Trust Land. The property is composed primarily of long, gently sloping alluvial fans, and ranges in elevation from 2,900 feet at its northwestern corner to approximately 5,000 feet in the southeast. According to the University of Arizona, the Santa Rita Experimental Range was founded to study range recovery from drought and overgrazing, as well as sustainable grazing practices. Livestock grazing has been studied by university and government scientists at the site for over 80 years. Public recreational trail access is not presently allowed on the property because of the site's primary research mission, but should the range's mission or access policy change in the future, the range's existing informal system of dirt access roads and trails should be tapped for a recreational trail system, particularly for equestrians.

### **Tortolita Mountain Park**

In 1986 and 1987, Pima County acquired 3,056 acres of land using 1986 Open Space Bond funding to establish Tortolita Mountain Park. The Park is now more than 4,000 acres, but is poised to grow considerably when several large parcels of BLM and Recreation and Public Purposes Act (R&PP) land, totaling more than 2,000 acres, are added to the Park. The 1997 and 2004 Open Space Bonds also included funding to acquire Arizona State Trust Lands that will expand the Park to the east and west.

### **Recreation And Public Purposes Act**

Congress, in 1954, enacted the Recreation and Public Purposes Act (68 Statute 173; 43 United States Code 869 et. seq.). This law is administered by the Bureau of Land Management. The act authorizes the sale or lease of public lands for recreational or public purposes to State and local governments and to qualified nonprofit organizations. Examples of typical uses under the act are historic monument sites, campgrounds, schools, fire houses, law enforcement facilities, municipal facilities, landfills, hospitals, parks, and fairgrounds. ([www.blm.gov](http://www.blm.gov))

Because the majority of the Park's land base is located in the middle of the mountain range, little on-the-ground work has been accomplished to develop a functional trail system. However, the Town of Marana has constructed 15 miles of trails in and around Wild Burro Canyon using 2004 Open Space Bond Funds, including Wild Burro Canyon Trail, Alamo Spring Trail, Upper Javelina Trail, Wild Mustang Trail, and the Cochise Spring Trail. A new public trailhead facility will be constructed by the Town in 2008-2009 adjacent to the Ritz-Carlton resort.

In addition, Pima County is preparing a master trails plan for the park that encompasses Pima County's existing holdings; the Town of Marana's 2,400-acre Tortolita Preserve; the undeveloped lands within the park's 1997 Board-adopted 21,035-acre master plan expansion



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boundary; and the expansion boundary identified in Pinal County's 2007 *Open Space and Trails Plan*. Other plans that reference Tortolita Mountain Park are: *Tortolita Mountain Park Master Plan (1997)*, *Pima County Comprehensive Plan (2001)*, *Sonoran Desert Conservation Plan (2001)*, *Tortolita Mountain Park Trail System Master Plan (2008)*, and *Pima Regional Trail System Master Plan (2008)*.

### **Tucson Mountain Park**

Tucson Mountain Park (TMP) was created by the Pima County Board of Supervisors in 1929. It now encompasses approximately 24,000 acres of Sonoran Desert open space and includes a shared-use trail system with approximately 62 miles of trails. The park's trails vary in condition from good to excellent. Several sections of the park's major trails, some of which began life as doubletrack jeep trails, are in need of rerouting to improve their safety and sustainability.

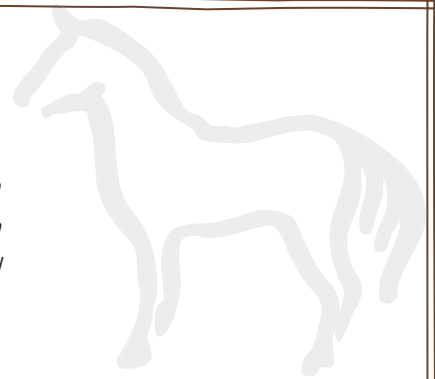
A new management plan for TMP was completed late spring of 2008. The plan reconfigured the park's trail system and identified several new trail segments for future construction. One of these segments is a new link from the planned Ajo Highway Ecoduct to the Starr Pass Trail, which will link TMP's trail system to the new trail system in the Robles Pass Trails Park. The plan calls for a realignment of the Cougar Trail in the northern part of the TMP, much needed signs for the park's trail system, and additional land acquisitions to insulate the park from encroaching development.

Public access to TMP has improved markedly in recent years with the construction of several new trailhead parking facilities, including the Starr Pass Trailhead (44 cars and 5 horse rigs), the 36th Street Trailhead (22 cars and 4 horse rigs), the Sarasota Trailhead (22 cars), and the improvement of the existing Camino de Oeste Trailhead from four unimproved parking spaces to 14 spaces in a parking lot on the west side of the road near its southern terminus. Other plans that reference Tucson Mountain Park are: *Sonoran Desert Conservation Plan (2001)*, *Pima County Comprehensive Plan (2001)*, *Tucson Mountain Park Management Plan (2008)*, and *Pima Regional Trails Plan (2008)*.

### **Proposed Natural Resource Areas with Trails**

#### **Cerro Colorado Mountain Park**

Like the proposed Sierrita Mountain Park, the creation of a new mountain park encompassing the Cerro Colorado mountain range was first formally proposed in the *Eastern Pima County Trail System Master*





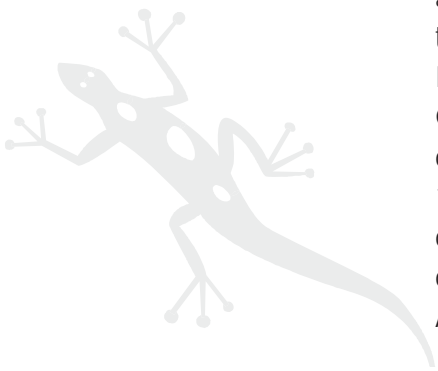
*Plan.* This proposal remains a viable possibility. The range's remote location and the fact that a large number of projects much closer to the metropolitan area remain to be completed (Tortolita Mountain Park is a prime example) have left this project to be pursued at a later date. This scenic range does possess significant opportunities for hikers. Mountain bikers and equestrians could benefit from the creation of a trail around the base of the range and/or a trail system on the adjacent Arizona State Trust Lands. Other plans that reference Cerro Colorado Mountain Park are: *Pima County Comprehensive Plan (2001)*, *Sonoran Desert Conservation Plan (2001)*, and *Pima Regional Trail System Master Plan (2008)*.

### **Empire Mountain Park**

The *Eastern Pima County Trail System Master Plan* proposed the creation of a mountain park encompassing the Empire Mountains, located approximately six miles south of Interstate 10 and a short distance east of Highway 83. This range is now located within the Congressionally-created Las Cienegas National Conservation Area, negating the need to create a preserve encompassing this range as a separate land management jurisdiction. The creation of additional trails in the Empire Mountains area would be subject to the U.S. Bureau of Land Management's adopted plan for the National Conservation Area. A number of trails are listed on the current master plan in this region; however, the nearest County-managed open space is the Cienega Creek Natural Preserve and the Empirita Ranch Historic Park. Other plans that reference Empire Mountain Park are: *Pima County Comprehensive Plan (2001)*, *Sonoran Desert Conservation Plan (2001)*, *Empire-Cienega Resource Conservation Area Management Plan (2004)*, and *Pima Regional Trail System Master Plan (2008)*.

### **Santa Rita Mountain Park**

The proposed 10,703-acre Santa Rita Mountain Park is situated in the picturesque foothills of the Santa Rita Mountains south of Sahuarita Road and west of State Highway 83. The proposed preserve, which surrounds the northeastern corner of the Nogales Ranger District of the Coronado National Forest, extends southward to the point where the Davidson Canyon drainage exits the Forest. The Park is principally composed of Arizona State Trust Lands (8,876 acres) but also includes about 1,826 acres of private property. It is home to several trails listed on the original *Eastern Pima County Trail System Master Plan* and a segment of the Arizona Trail. A perpetual right-of-way for the segment of the Arizona Trail that crosses the property was acquired in June 2004 from



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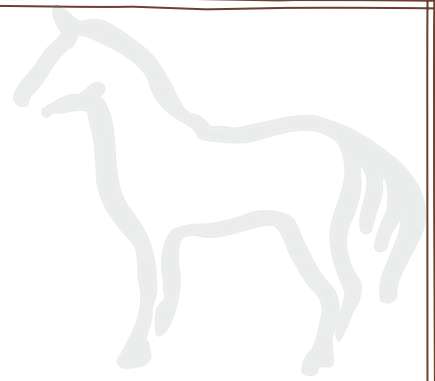
the Arizona State Land Department. The Arizona Trail segment was constructed by Pima County NRPR and volunteers in 2007-2008.

Creation of the Santa Rita Mountain Park, which is called for in Pima County's *Sonoran Desert Conservation Plan*, would protect the scenic northeastern slopes of the Santa Rita Mountains, an important viewshed that can be seen from the majority of the Tucson basin. The northern foothills of the Santa Ritas have already been impacted by residential development and mining activity and the foothills region within the park represents a rapidly diminishing opportunity to protect the area's superb scenic values. Protecting this property would also help protect the Highway 83 Scenic Corridor (a State Scenic Route) as well as a key segment of the range's northern watershed which drains into Davidson Canyon, which in turn drains into Cienega Creek and then Pantano Wash. Creation of the Park would protect a considerable amount of valuable grassland and upper Sonoran wildlife habitat and help mitigate the effects of the impending Rosemont Mine, which is anticipated to have considerable impact on the Santa Rita Mountains.

Acquisition of the State Trust Land portion of the proposed park would require the utilization of an Arizona Preserve Initiative-type conservation mechanism that would allow the land to be protected in perpetuity by Pima County. Future open space bond programs could be utilized to fund the acquisition of both the State Trust Land and the private property sold by willing sellers. Other plans that reference Santa Rita Mountain Park are: *Pima County Comprehensive Plan (2001)*, *Sonoran Desert Conservation Plan (2001)*, and *Pima Regional Trail System Master Plan (2008)*.

### **Sierrita Mountain Park**

The creation of a new County mountain park encompassing the Sierrita mountain range was proposed in the original *Eastern Pima County Trail System Master Plan* and explored as a part of the development of the *Sonoran Desert Conservation Plan*. Resistance to the idea from residents living in the area caused Pima County to table the mountain park proposal at the time. The possibility of a mountain park in that area remains an idea worth exploring, and by working with the principal landowners in the area—the U.S. Bureau of Land Management and the Arizona State Land Department—Pima County could facilitate the creation of another high-quality recreational trail system in a protected natural resource setting in eastern Pima County. Several trails listed on the Regional Trail System Master Plan link with the range, facilitating



connections between the proposed park and the Regional Trail System. Other plans that reference Sierrita Mountain Park are: *Pima County Comprehensive Plan (2001)*, *Sonoran Desert Conservation Plan (2001)*, and *Pima Regional Trail System Master Plan (2008)*.

### Additional Landscape-Level Open Space Preserve Trail System Opportunities

While the creation of new large-scale open space preserves in proximity to Tucson is not anticipated in the near term, opportunities to protect large quantities of valuable open space does exist in the eastern Pima County area. One such opportunity is the large tract of Arizona State Trust Land located between the Cerro Colorado and Sierrita mountain ranges. The property is presently used for ranching, but its high-quality Sonoran Desert could also provide excellent recreational opportunities for equestrians and mountain bicyclists. Tucson Water's large holdings in the Avra Valley, which exceed 30,000 acres, could provide opportunities for recreational trail users, particularly equestrians. Other possibilities include the large blocks of State Trust Land between the Sierrita Mountains and the Tohono O'odham reservation and immediately south of the Garcia Strip, both of which appear to present opportunities for equestrians. These opportunities should be explored at the appropriate time.

### *Latent Demand*

The urban network is a system of alternate transportation routes that enables people to move around and through the urbanized areas by non-motorized means, for example, on foot, bicycle, etc. Because many of the traditional natural trails and pathways in the urbanized areas either no longer exist, are not in a form that can be easily and/or safely used, or may not be under public ownership, it is often necessary to retrofit a system of alternative non-motorized routes into the built, urban environment. Ideally, the urban network will be linked to the traditional trail system located outside of the more urbanized areas; it should also be designed so that users can easily switch between the motorized and non-motorized networks.

### Latent Demand for Trails in Tucson's Urban Core

Providing new trail connections from Tucson's urban core area to the surrounding regional trail network was addressed, in part, by the use of a latent demand analysis. Since trails and paths historically tend to follow significant landscape features, they provide only a portion



### Latent Demand

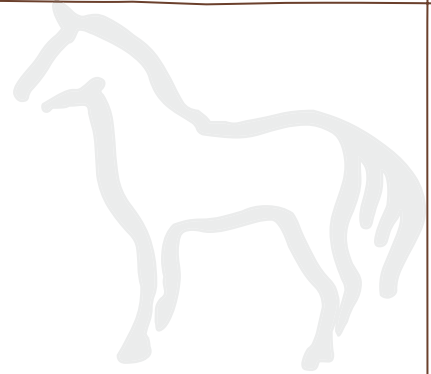
Latent demand is a methodology of analyzing which routes pedestrians would be most likely to use if vehicular traffic were not an impediment.



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of the region's non-vehicular mobility routes. In the urbanized areas, the ability to move about easily without a vehicle depends upon an interconnected system of sidewalks or pedestrian routes that provide links between where people are and where they want to go. Current development standards typically require that sidewalks be constructed with new development, but more can be done to facilitate pedestrian travel in the metro Tucson area.



Recent studies have been conducted in the metro Tucson and Phoenix areas to assess where pedestrian systems would be most utilized, i.e., where the demand is greatest. The Pima Association of Governments (PAG) *Regional Pedestrian Plan - July 2000*, identified several Pedestrian Area Designations, including Pedestrian Districts, Activity Corridors, Activity Centers, and Transit Routes. Assessing or predicting where these pedestrian areas are located was done through a Pedestrian Latent Demand Assessment. Logically, in areas where there are concentrations of existing or potential pedestrians, the pedestrian environment should be enhanced to encourage even more use of alternative transportation modes, such as multi-use trails and paths.

Mathematical models have also been used by PAG, as well as the Maricopa Association of Governments (MAG), to determine Pedestrian Latent Demand. The Pedestrian Latent Demand Model estimates pedestrian activity along segments of roadway corridor based upon the frequency and proximity of adjacent trip destinations (attractors), such as parks, schools, employment centers, and trailheads, and origins (generators), such as residential neighborhoods. The results are not surprising: areas of highest population density with the greatest mix of uses have the highest pedestrian latent demand, while areas with the lowest density and single land uses have the lowest latent demand. The models often quantify what seems both inherently reasonable and predictable.

For the purposes of this planning process, a more simplified and intuitive approach was used to determine latent demand in the urban core area. The Pedestrian Latent Demand Assessment process was used to match recommended pedestrian accommodations to anticipated levels of pedestrian activity (also see Appendix A-1), and this formed the basis for identifying where pedestrian system elements should be implemented with priority.







# Master Plan

## A. Vision and Goals

### *Vision*

In August of 2007, Charles Flink, a well-known trails designer and speaker, gave a presentation on national trail trends, specifically on trails in Pima County. Road diets and land bridges were just two of the trends he discussed. Based on his local observations, Mr. Flink identified two key areas for improvements: the need for uniform trail standards and the need to complete the river trail system. Based on the public meetings conducted for this study, input from local advocates, and assessments from recognized experts such as Mr. Flink, the resulting vision for the trails plan is:

*Pima County envisions a safe, diverse trail system that provides outstanding recreation, fitness, and transportation opportunities for residents and visitors, including physically-challenged users, which contributes to the physical, health, and economic well-being of the community and overall quality of life.*

### *Goals*

The goals of this plan are the same as those from the 1989 and 1996 EPCTSMP. They are summarized as follows: provide a trails network throughout the region; expand the system to connect recreation lands; extend trails into urbanized areas where they are lacking; accommodate all users; and co-locate trails with other community facilities. Additional goals to achieve a trail system that will be widely used and embraced include:

- Create connectivity between homes, schools, jobs, and commerce.
  - Extend trails into areas that have no connection to the system.
  - Increase connectivity between trails, creating loops that provide a range of options and experiences.
  - Develop a trails network that connects to other modes of travel (bus system, transit system).
- Increase opportunities for interpretive experiences.

### In this chapter

Vision and Goals  
Guiding Principles  
Trail System Elements  
Standards  
Facilities List



### This plan envisions...

...a trail system that is of the highest quality and serves as a model for other communities in the country.

### Mission

...provide access to the trail system within 15 minutes walking distance of the majority of Pima County residents...







- Increase educational outreach through the use of kiosks, trail-walking, and nature guides.
- Continue to acquire land for wildlife corridors and wetlands that can include interpretive trails about the environment.
- Encourage a wider range of involvement and use of the Trail System from the community.
  - Improve trail signs and mapping so the trail system is easier to navigate.
  - Increase the amount of information provided to the public (marketing) so that this amenity is visible to all interested users.
  - Increase the number of trailheads (access) to the system.
- Improve safety measures throughout the trail system.
  - Increase informational signs along the trail system to educate users about the appropriate measures and rules to follow on multi-use paths/trails.
  - Maintain and improve the condition of paved paths.
  - Support the creation of a volunteer corp to help staff operations and maintenance shortfalls.

The mission of the updated Pima Regional Trail System Master Plan is to provide access to the trail system within 15 minutes walking distance of the majority of area residents. Equally important is to develop a system of interconnected trail facilities that effectively link communities, parks, schools, destination attractions, and open spaces within the greater Tucson Metropolitan area.

## B. Guiding Principles

To achieve the primary goal of developing the *Pima Regional Trail System Master Plan*, the following principles were embraced:

### *Natural Resources*

The Pima Regional Trail System Master Plan is committed to the protection and enhancement of native vegetation and wildlife habitat located in and adjacent to trail corridors. Wide trail corridors should be created using native plant materials wherever possible. In addition, all new development should be required to contribute to the metropolitan area's green infrastructure, thus ensuring the enhancement of existing vegetative and wildlife habitat and providing additional open space in the community. Water harvesting techniques should be incorporated

throughout the corridors to conserve water and promote healthy habitat.

### ***Cultural Resources***

The Pima Regional Trail System Master Plan is committed to the protection and preservation of valuable cultural resources located in and adjacent to trail corridors. Pima County has been home to human habitation for thousands of years. The ancient peoples that first lived in the region left many important remnants of their settlements that remain to be discovered, and are being uncovered as new projects are implemented around the metropolitan area. More recent historical features, such as the downtown Presidio wall, are being uncovered, re-interpreted, and celebrated as key elements of Pima County and Tucson's past. These remnants of cultural heritage are important to researchers in their ongoing efforts to understand as much as possible about the peoples that came before, and the protection of these assets is critically important.



The jurisdictions participating in this planning process are committed to the protection of cultural resources, both ancient and historic. To assure the preservation of these resources, cultural resource surveys will be undertaken as a part of every project, consistent with the policies and approaches of each jurisdiction.

### ***ADA Compliance and Opportunities for All Users***

The Pima Regional Trail System Master Plan is committed to providing recreational trail opportunities for users of all abilities. Everyone, to the maximum extent feasible, should have the opportunity to share as many elements of the regional trail system as possible. While some of these elements may remain beyond reach, such as backcountry trails in extreme terrain, this Master Plan strives to ensure that the majority of elements are accessible.

What "accessible" means for the purposes of this plan is to be as consistent as possible with the Americans with Disabilities Act (ADA). One way to remove such barriers is to apply ADA-recommended design standards on a regular basis, not just to certain trail segments or trails



#### **Guiding Principles**

-  Natural Resources
-  Cultural Resources
-  ADA Compliance and Opportunities
-  Sustainability and Green Infrastructure
-  Consistent Trail Standards
-  Health and Fitness
-  "Trailsportation"



parks. A real-world example is Feliz Paseos Universal Access Park (described later in this plan).

## ***Sustainability and Green Infrastructure Integration***

The Pima Regional Trail System Master Plan is committed to the concept of “sustainability.” In recent years, the concept of “sustainability” has become an increasingly significant concern to individuals and organizations worldwide. Sustainable trail design accommodates existing and future uses without degrading the natural environment.

## ***Consistent Trail Standards***

The Pima Regional Trail System Master Plan is committed to developing consistently throughout the region, utilizing one set of development standards for all jurisdictions. The development of an interconnected regional trail system will require consistent design and construction in order to provide seamless transition from one jurisdiction through another.



## ***Health and Fitness***

The Pima Regional Trail System Master Plan is committed to expanding human health. Providing for a variety of outdoor activities is beneficial to maintaining and improving human health.

## ***“Trailsportation” Concept***

The Pima Regional Trail System Master Plan is committed to accommodating the widest range of uses and users as well as providing opportunities for local citizens to move through the community without an automobile. The trail corridors described in this plan, such as the river parks, greenways, linear parks, and other shared-use facilities, to the largest extent possible, will be designed to provide a separated and divided unpaved trail adjacent to a paved path to offer trailsportation opportunities for all non-motorized user groups.

## **C. Trail System Elements**

Paths, trails, and their associated amenities are the connective, non-motorized transportation and recreation elements that tie the region's communities (Tucson, South Tucson, Marana, Oro Valley, and Sahuarita) and destinations together. These destinations can be local in nature, such as neighborhood parks, schools, and neighborhood shopping areas, or can be regional destinations such as national parks and forests, River

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Parks, downtown Tucson, emerging community cores, the University of Arizona, and major employment and shopping areas.

Trails and paths are generally located within parks, open space areas, along drainage features, railroad and utility corridors, and adjacent to vehicular routes. They are located and designed for all types of users with various levels of abilities. Trailheads and access points are located to maximize residents' ability to easily and safely access the path and trail system. Enhanced crossings along path and trail routes will minimize users' potential conflicts with vehicles and improve their safety and comfort.

The Pima Regional Trail System at its most basic level is an interconnected multi-modal network of paths and trails. The system philosophy is **respectful mutual accommodation**—all users share all paths and trails unless there is a safety issue or technical limitation. Only motor vehicle users are not permitted on the trail system. Path and trail surface material tends to be self-selecting for the type of use that will be attracted to either a trail or path. For instance, roller bladers prefer paved surfaces and equestrians prefer unpaved surfaces.

When complete, the system will be an interconnected network of corridors and destinations capable of providing high-quality recreation, fitness, and alternate transportation opportunities for multiple users including walkers, joggers, roller bladers, bicyclists, and equestrians. It should be remembered that the lists of elements and maps are not intended to be exclusive and exhaustive. Additional corridors or projects may be identified and added as opportunities arise, enhancing the overall system.

Following are short descriptions of Main and Supporting Elements followed by more detailed standards and finally, descriptive lists of all facilities by type.

## ***Main Elements***

### **Trails**

Trails are used by multiple user groups such as mountain/recreational bicyclists, walkers, runners, hikers, equestrians, and others who prefer a soft, natural surface rather than a hard paved surface. Trails connect local and regional destinations and neighborhoods within a larger trail network. They are located in all types of situations: along roadways, washes, utility corridors, and within small and large open space areas.



### **Trail System Philosophy**

Respectful mutual accommodation  
- all users share all paths and trails  
unless there is a safety issue or  
technical limitation



They may be used by small maintenance and emergency response vehicles.

## Backcountry Trails

These trails are located within preserved open space, washes, mountainous areas, non-developed, or protected areas. They are built with greater sensitivity to the existing natural environment and are therefore narrower than the trail used in more developed parts of the system, but still should accommodate multiple user groups who prefer an unpaved surface. Backcountry Trails should be no wider than they need to be, three feet being the recommended minimum.



## Paths

This paved facility is used by bicyclists, pedestrians, joggers, strollers, wheelchair users, in-line skaters, other non-motorized users, and anyone wanting a smooth and consistent surface. Paths are signed for various users, are ADA accessible (when less than five percent grades), and may also be used by small maintenance and emergency response vehicles.

Paths include an adjacent four-foot unpaved shoulder on one side to provide greater options for the diversity of non-motorized users from roller bladers, who prefer a paved surface, to joggers, who prefer an unpaved surface.

## River Parks

River Park corridors have a separated and divided path and trail on both sides of the river, offering the maximum opportunities for non-vehicular transportation. This separated and divided path/trail combination is similar to the Divided Urban Pathway shown in the current Pima County standards.









## Greenways

Greenways are a corridor that typically features a path and trail, preserved native vegetation and/or landscape plantings, and pedestrian amenities. Greenways typically follow washes








## Plan Elements

### Main Elements

-  Trails
-  Backcountry Trails
-  Paths
-  River Parks
-  Greenways
-  Enhanced Bicycle/Pedestrian Corridors
-  Bicycle Boulevards
-  Trails Parks

### Supporting Elements

-  Trailheads, Entry Nodes, and Boundary Access Points
-  Crossings
-  Signs
-  Pedestrian Districts
-  Pedestrian Activity Areas

or drainageways but can also be adjacent to roads. If the greenway is along a wash, the path and trail can be together on one side or one on each side of the wash. Greenways are similar to River Parks except that right-of-way width is less, features are less extensive, and at-grade crossings of streets are more common.

### Enhanced Bicycle/Pedestrian Corridor

Enhanced Bicycle/Pedestrian Corridors are a special designation for areas intended to link regional and community destinations via city streets in denser, mixed-use areas. Enhanced Bicycle/Pedestrian Corridors generally follow existing local or collector streets that carry a relatively low volume of automobile traffic. They are intended to enhance safety and be attractive corridors that encourage bicycle and pedestrian use. Essential improvements include continuous bicycle lanes and continuous sidewalks with ramps. Landscape plantings, street furniture, transit shelters (where appropriate), and public art should also be included along these corridors. Tucson's Mountain Avenue was developed as a prototype for this type of corridor.



### Bike Boulevard

Bike Boulevards are corridors that typically follow a local street or streets with a low volume of automobile traffic. Local automobile traffic is allowed on these streets but traffic controls are designed to give priority to bicycles. Features such as TOUCAN crossings (see Glossary and page 41 for information on TOUCANs) signaling systems are used at intersections where appropriate. Bike boulevards are predominantly a transportation improvements and are usually funded using transportation dollars; however, they are discussed in this plan because they are a valuable component of the trail system so should also be considered for trails funding.

### Trails Parks

Trails Parks are large, primarily desert open space properties located in the developed or developing areas of the region to provide convenient access to trail-focused recreation. Trails parks contain multiple looped trails and a variety of trail experiences and amenities. Locating trails parks in developed areas provides convenient access to trails for a large number of users.





## *Supporting Elements*

### **Trailheads, Entry Nodes, and Boundary Access Points**

There are several types of improved access points which ensure public access to the path and trail network while enhancing safety and user experiences. Most importantly, the overall success of a trail/path system largely depends on the ease with which people can access the facilities, either by walking, riding or biking from home or by driving to convenient, safe, and well-equipped trailheads. The types of access points in the Pima Regional Trail System are Trailheads, Entry Nodes, and Boundary Access Points.

#### **Standard Trailhead**

Trailheads are located along all types and levels of trail and path corridors. They provide parking spaces, as well as non-vehicular, access to local and regional destinations and open space areas. There are two proposed Standard Trailheads - large and small. They can be located within neighborhood, community, or trails parks or can be built as separate facilities. See the Standards section for more information. A Standard Trailhead provides trail and path users with convenient parking, informational signs, and other amenities associated with a jumping off point for the path and trail system.

#### **Trailhead With Equestrian Facilities**

There are two proposed sizes of Trailheads with Equestrian Facilities: large and small. These facilities provide features for equestrian uses as well as other trailhead parking and amenities. These facilities can be located along all classifications of unpaved trail corridors.

#### **Neighborhood Equestrian Park and Trailhead**

The combined Neighborhood Equestrian Park and Trailhead features a trailhead with additional equestrian amenities suitable for a park located in an equestrian neighborhood. Tucson's Ormsby Park's planned facility is an example of this type of park. Certain areas of Pima County currently have, or are likely to have, equestrian privileges where residents can keep horses on their property. This combined park and trailhead category provides trail access while also enhancing these areas by providing close-to-home facilities for riding and training horses, as well as serving as



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a location for small scale equestrian events and activities.

### **Entry Nodes**

Entry Nodes are developed access areas along all types of path and trail corridors that serve to encourage and welcome neighborhood and local pedestrian, equestrian, and bicycle access to the path/trail system. They provide minimal amenities, most importantly trail system signs. They should be located at approximately one-quarter-mile intervals along corridors, a distance typically cited as a reasonable walking distance to a destination. Entry nodes typically do not include parking facilities, but could have up to five standard size spaces depending on needs and circumstances. Because there would be numerous nodes using this spacing recommendation, they are not mapped. A concept sketch is provided in the Trailheads, Entry Nodes, and Boundary Access Points standards section.

### **Boundary Access Points**

Boundary Access Points are the smallest, most basic entry point to the natural resource areas surrounding Tucson. They are generally a four-foot wide gap in the boundary fence with a small trail sign. Parking is not provided. The small fence gap prohibits access by motorized vehicles.

## **Crossings**

A critical aspect of any trail plan is how it interfaces with street, drainage, and utility infrastructure at crossings. Incorrectly addressing these crossings can create a sense of discomfort from users that would discourage them from using an otherwise well-connected trail system. Therefore, the points at which paths and/or trails overlap or intersect with streets, washes, rivers, and utility corridors require special attention.

The Master Plan identifies two crossings types:

- Grade-separated Crossings
- Enhanced At-grade Crossings

### **Grade-separated Crossings**

Grade-separated crossings typically occur when a road bridges over a path or trail following a river or other linear corridor. Where possible, paths and trails should be routed to this type of crossing, where a bridge or culvert already exists, or where one is feasible in the future, especially where a trail crosses a major arterial. There are several types of grade-separated crossings that are discussed in more detail in the standards



section of this chapter: Bridge Underpasses, Pedestrian Underpasses, Shared Bicycle/Pedestrian Bridge Overpasses, and Land Bridges.

## Enhanced At-grade Crossings

Where opportunities for grade-separated crossings are limited or nonexistent, and/or where heavy equestrian traffic is expected, special design consideration can be made for at-grade crossings. Special trail crossing treatments can create a greater sense of security, comfort, and convenience for equestrians, as well as all users. These treatments are considerably less costly than grade-separated crossings and provide a greater opportunity to be used more frequently. They can occur at street intersections, as well as mid-block crossings. Various options are detailed in the standards section.

## Signs

There are several categories of signs that are typically associated with a trail system. They range from large-scale signs announcing entrances to parks and trailheads to small-scale feature ID or interpretive signs. A coordinated system of wayfinding gives users needed information while providing opportunities for systemwide “branding” and education. Sign guidelines are provided at the end of the standards section.

## Pedestrian Districts and Activity Areas

Since trails and paths tend mostly to follow significant physical features in the landscape, they provide only a portion of the region’s non-vehicular mobility routes. In more urbanized areas, the ability to move about without a vehicle will depend upon an interconnected system of sidewalks and/or pedestrian routes. Current development standards typically require sidewalks be constructed, but more can be done, particularly in areas where high pedestrian traffic is expected. This plan builds upon the work done in the Pima Association of Governments *Regional Pedestrian Plan* (July 2000) which identified several pedestrian area designations: Pedestrian Districts; Activity Corridors; Activity Centers; and, Transit Routes. It also corresponds to the *Downtown Pedestrian Implementation Plan* (1996), a plan with projects and guidelines to create a pedestrian-friendly Downtown environment.

For this document, these four destinations were simplified to two and focused more on geographic areas or hubs, rather than pedestrian corridors. The two are:

- Level 1: Pedestrian Districts
- Level 2: Pedestrian Activity Areas

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Within the urbanized areas of Pima County, it is recognized that certain areas generate high volumes of pedestrian activity due to, typically, unusually high concentrations of employment, commercial activity, residents, or city services. Two Pedestrian Districts, the University of Arizona and the Tucson City Center, were identified within the City of Tucson's urban core area. Pedestrian Activity Areas were identified in places that generated high employment and/or commercial activity. Several Pedestrian Activity Areas were identified within Tucson, as well as within each of the surrounding jurisdictions of South Tucson, Marana, Oro Valley, and Sahuarita.



A Pedestrian Latent Demand Assessment was used to predict where these pedestrian districts or activity areas are located throughout the region. This tool is a simplified version of models used to determine pedestrian latent demand which estimates potential pedestrian activity along segments of roadway corridor, based upon the frequency and proximity of adjacent trip destinations (parks, schools, employment and trailheads) and origins (residential). The model uses much of the same socio-economic data as that used in motor vehicle and transit travel forecasting, but with adjustments based on specific travel characteristics of the pedestrian. The model assumes that there are no constraints to pedestrian travel other than distance, applying an "if you build it they will come" philosophy to determining potential pedestrian activity within an area.

Areas of highest population density and with the greatest mix of uses have the highest pedestrian latent demand and those areas with lowest density and single land uses have the lowest latent demand. In areas where there are great concentrations of existing or potential pedestrians, the pedestrian environment should be enhanced to encourage even more use of alternative transportation modes. See the Appendix for the pedestrian latent demand assessment matrix that was used to determine the Pedestrian Districts and Pedestrian Activity Areas. A general area's score is equated to guidelines associated with Pedestrian Districts and Pedestrian Activity Areas.



### Level 1 Pedestrian Districts

- Downtown Tucson
- University of Arizona Campus

### Level 2 Pedestrian Activity Areas

- Marana Central Business District
- Oro Valley Central Business District
- Sahuarita Central Business District
- South Tucson Central Business District
- Pima Community College East and West
- Park Place
- Williams Center
- Tucson Medical Center
- Kino Sports Complex
- The Bridges
- Tucson Mall
- Foothills Mall
- Arizona Pavilions

### *User Needs Accommodation*

During this planning process, focus group meetings were held with a variety of users and interest groups. These meetings helped to clarify the particular needs and wants of the users. The following table describes the thought process used to ensure that all types of path and trail users are accommodated in the Pima Regional Trail System.

## USER NEED ACCOMMODATION

User/Need	Paved Surface	Natural Surface	Long Distance (> 3 miles)	Grade Separations	Short Distance (< than 3 miles)	Natural Experience	Best Accommodation
Equestrians	☐	■	■	■	☐	☐	<ul style="list-style-type: none"> <li>• Trails</li> <li>• River Parks trails</li> <li>• Backcountry Trails</li> </ul>
Hikers	☐	■	☐	■	☐	■	<ul style="list-style-type: none"> <li>• River Park's wide shoulder of path</li> <li>• Backcountry Trails</li> <li>• Trails</li> </ul>
Mountain Bikers	☐	■	☐	■	☐	■	<ul style="list-style-type: none"> <li>• River parks wide shoulder of path</li> <li>• Backcountry Trails</li> <li>• Trails</li> </ul>
Roller Bladers	■	☐	■	■	☐	☐	<ul style="list-style-type: none"> <li>• River Parks path</li> <li>• Paths</li> </ul>
Trail Runners	☐	■	■	■	☐	☐	<ul style="list-style-type: none"> <li>• Backcountry trails</li> <li>• River parks wide shoulder of path</li> </ul>
Walkers/Joggers	☐	☐	☐	■	☐	☐	<ul style="list-style-type: none"> <li>• All facilities including Pedestrian Districts and Areas</li> </ul>
Physically Challenged	■	☐	☐	■	☐	☐	<ul style="list-style-type: none"> <li>• All paths and sidewalk facilities throughout region</li> </ul>
Street Cyclists	■	☐	☐	☐	☐	☐	<ul style="list-style-type: none"> <li>• All paths, Bike Boulevards, Enhanced Bicycle/ Pedestrian Corridor</li> </ul>
<b>KEY:</b> ■ Preferred      ☐ Acceptable      ☐ Not Acceptable							





## D. Standards

The following standards were developed to provide the jurisdictions with a set of details, drawings, and tables that can be used to guide more consistent development of the regions' trails, non-motorized unpaved and paved paths, pedestrian areas, enhanced bicycle and pedestrian corridors, access areas, and special crossings. These facilities are intended to improve recreational opportunities and connectivity. They include those in parks, along drainage features, other open space areas and along vehicular routes. Detailed information is provided for individual facilities like a trail, as well as, corridor width standards for combined facilities such as a Greenway or River Park, which combines both paved paths and unpaved trails within one corridor. Additionally, specific materials, widths, and clearances are identified. These standards do not, however, include specific standards for on-street bicycle facilities.

Current standards vary somewhat by jurisdiction. These proposed standards are recommended for use by all the jurisdictions, unless there are more restrictive standards that apply.

Paths and trails always occur within a particular setting. Therefore, in addition to standards for a path and/or trail, the "corridor standards" below identify the IDEAL SPATIAL RELATIONSHIPS of paths and trails to each other, to roadways, buildings, river edges, walls, fences, property lines, and other features. The recommended corridor width is a combination of the path and/or trail, available right of way (right of way width minus roadway pavement and median width), easements, tracts and/or setbacks. Every effort should be made to maintain these corridor widths to provide user safety and comfort, a respect for the environment, and respect for neighbors. It is likely that these recommended corridor widths can be accommodated within the available right of way and land already set aside for utility easements, building, and landscape setbacks.

Trail and path users are particularly sensitive to their adjacency to roadways. The corridor standards, therefore, strive to enhance the user's sense of security and comfort along roadways by increasing the setback between the road and trail/path where the roadways are widest, busiest and noisiest. Wider setbacks are preferred but adding on-street parking or vertical barriers such as railings or seatwalls can also provide the desired sense of security. Narrower setbacks are acceptable along quiet neighborhood streets. Therefore, the recommended corridor width will vary based upon the type of roadway and the type of trail/path.



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When available corridor widths are extremely narrow, the path and/or trail width should meet the standard and the landscape area standard should be reduced.

The Standards Section is organized as follows:

**Main Elements**

- Trails and Trail Corridors
- Backcountry Trails and Trail Corridors
- Paths and Path Corridors
- Path and Trail Corridors
- Enhanced Bicycle/Pedestrian Corridors
- Bicycle Boulevards
- Trails Parks

**Supporting Elements**

- Trailheads, Entry Nodes, and Boundary Access Points
- Crossings
- Signs
- Pedestrian Districts
- Pedestrian Activity Areas



# Trails

Trails are used by multiple user groups such as mountain/recreational bicyclists, walkers, runners, hikers, equestrians, and others who prefer a soft, natural surface rather than a hard paved surface. Trails connect local and regional destinations and neighborhoods within a larger trail network. They are located in all types of situations: along roadways, washes, utility corridors, and within small and large open space areas. They may be used by small maintenance and emergency response vehicles.

## DESIGN CONSIDERATIONS

**Sight Lines.** Lay out trails to maximize visibility of approaching trail users, thereby increasing reaction time and minimizing conflicts.

**Grades.** Lay out trails to minimize extreme slopes and grade changes thereby allowing users to stay under control at all times. A variety of slopes creates a more interesting and positive experience.

**Alignment.** Vary the trail alignment to create an interesting variety of views and to avoid specimen plants.

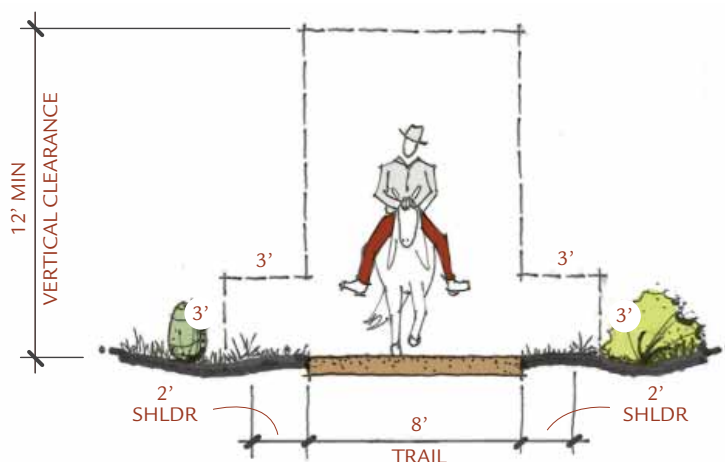
**Drainage.** Provide drainage control techniques that avoid any drainage flow above or across a trail.

**Setbacks.** Landscape setback standards are expressed as minimums. They should be as wide as possible.

**Plant Preservation.** Care should be given during trail construction to preserve existing vegetation in place.

**Landscape.** Landscaping is an opportunity to highlight and enhance regional and local character, therefore, landscaping shall be native and/or near native. Water harvesting techniques should be integrated into design wherever possible. Refer to local jurisdictions for specific approved plant lists.

<b>Width</b>	Eight feet	<b>Turning Radius</b>	12-foot minimum
<b>Shoulder</b>	Minimum two-foot soft/mowed/six-inch max. height herbaceous plants/native soil	<b>Surface Material</b>	Compacted (imported decomposed granite or native soil) to minimize skidding
<b>Vertical Clearance</b>	12-foot minimum	<b>Running Grade:</b>	<5% = 1500' 5-8% = 800'-1500' 8-10% = 500'-800' >10% = max 500'
<b>Side Clearance</b>	No vegetation or obstacles within a three-foot high by three-foot wide space each side. Three-foot minimum to signs, benches, or any vertical element.	<b>Cross Slope</b>	Two percent (5 percent maximum; 4 percent maximum at paved crossings)
<b>Thorny Plants</b>	Minimum 10-foot clearance between trail edge and newly planted thorny plants. Align trail to avoid existing thorny plants wherever possible to minimize their removal.	<b>Trees and Shrubs</b>	Trees: One tree per every 15 feet along both sides of trail Shrubs: Two shrubs per tree
<b>Clearance to Trees</b>	Minimum six feet (provide minimum ten-foot clearance between trees and sewer lines)		



# Trails

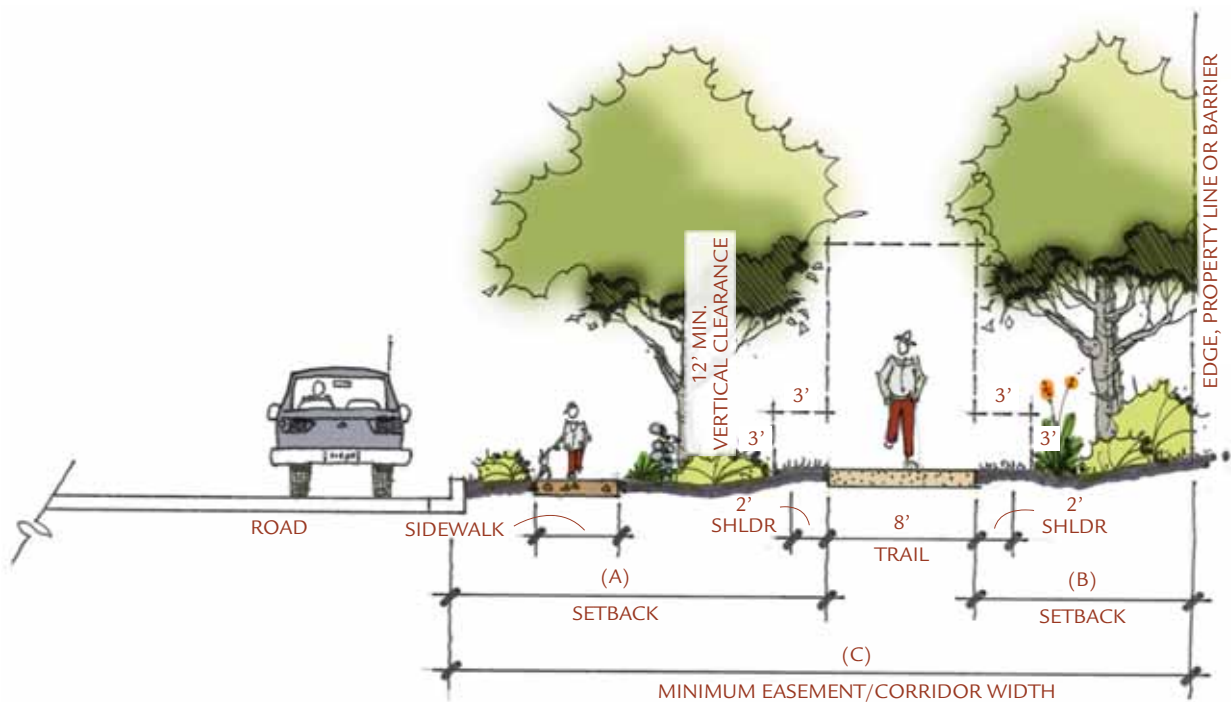
## Trail Corridor Adjacent to a Road

Transportation Classification	Minimum Setback From Edge of Road Pavement and Trail Edge <sup>1</sup> (A)	Trail Tread Width	Minimum Setback From Path Edge to Adjacent Barrier Edge or Property Line <sup>2</sup> (B)	Minimum Trail Easement/Corridor Width <sup>3</sup> (C) = (A) + 8' + (B)
Freeway/Expressway (over 55 MPH)	30'	8'	12'	50'-52'
Major/Minor Arterial and Collector Street (30-55 MPH)	20'	8'	12'	40'-42'
Local Street (25 MPH and under)	6'	8'	6'	20'-22'

1. Includes two-foot shoulder, three-foot high by three-foot wide vegetation clearance and sidewalk if required.

2. Increase width as needed in areas of steep or difficult terrain to accommodate switchbacks, avoidance of obstacles, etc.

3. If minimum corridor width is not available, priority should be given first to providing the distance between the edge of road pavement and the trails, second to the distance from the trail edge to the adjacent barrier, edge or property line defined as a fence, wall, building, etc.

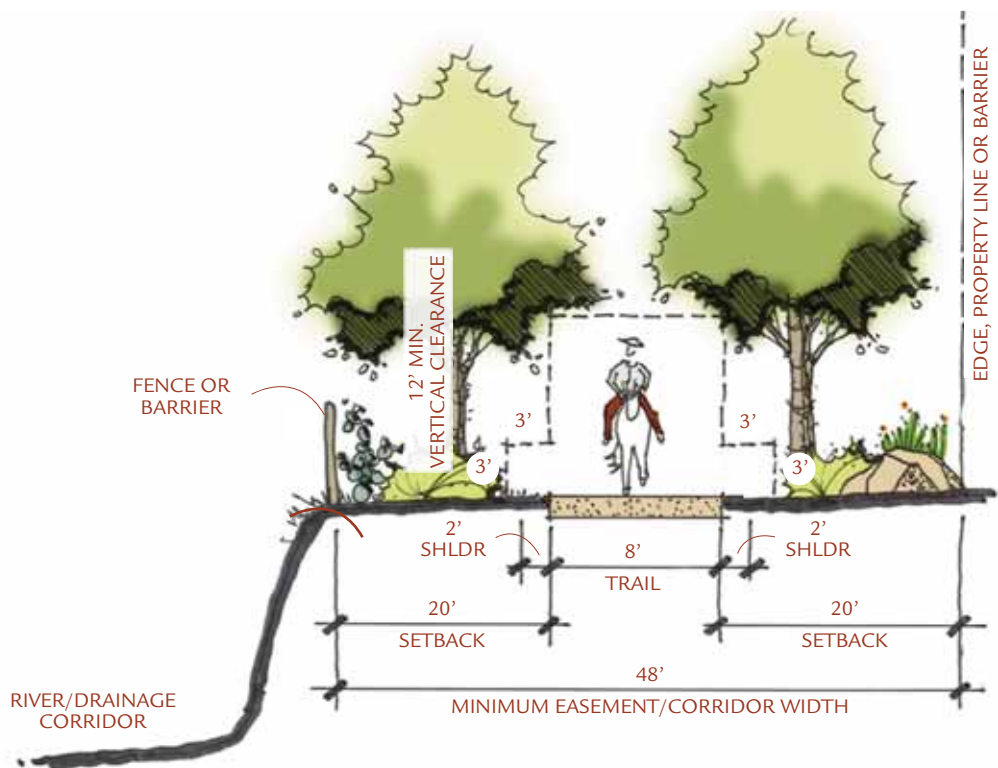


# Trails

## Trail Corridor Adjacent to a River or Drainageway

Trail Width	Setback From Trail Edge to Adjacent Barrier Edge or Property Line <sup>1</sup>	Minimum Trail Easement/Corridor Width <sup>2</sup> = 8' + (2 x 20')
8'	20'	48'

1. Includes two-foot shoulder and three-foot high by three-foot wide vegetation clearance each side.  
2. Increase width as needed in areas of steep or difficult terrain to accommodate switchbacks, avoidance of obstacles, etc

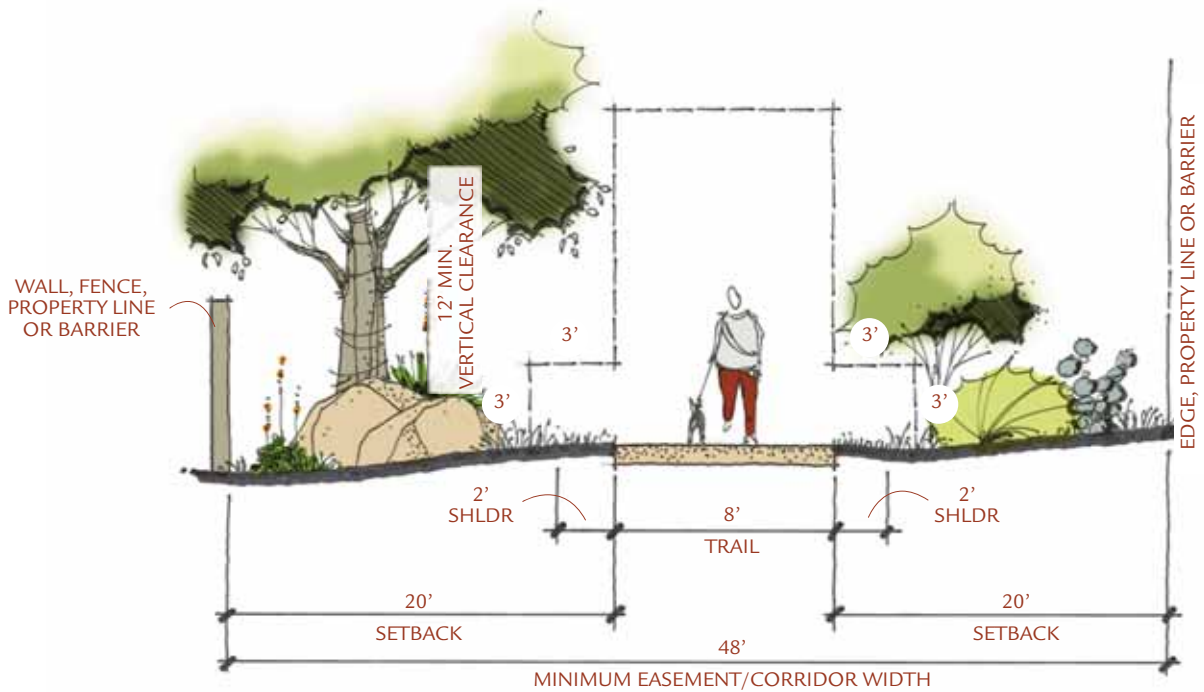


# Trails

## Trail Corridor in an Open Space/Greenway (other than a River or Drainageway)

Trail Width	Setback From Trail Edge to Adjacent Barrier Edge or Property Line <sup>1</sup>	Minimum Trail Easement/Corridor Width <sup>2</sup> = 8' + (2 x 20')
8'	20'	48'

1. Includes two-foot shoulder and three-foot high by three-foot wide vegetation clearance each side.  
2. Increase width as needed in areas of steep or difficult terrain to accommodate switchbacks, avoidance of obstacles, etc





# Backcountry Trails

These trails are located within preserved open space, washes, mountainous areas, non-developed, or protected areas. They are built with greater sensitivity to the existing natural environment and are therefore narrower than the trail used in more developed parts of the system, but still should accommodate multiple user groups who prefer an unpaved surface. Backcountry Trails should be no wider than they need to be, three feet being the recommended minimum.

## DESIGN CONSIDERATIONS

**Sight Lines.** Lay out trails to maximize visibility of approaching trail users, thereby increasing reaction time and minimizing conflicts.

**Grades.** Lay out trails to minimize extreme slopes and grade changes thereby allowing users to stay under control at all times. A variety of slopes creates a more interesting and positive experience.

**Alignment.** Vary the trail alignment to create an interesting variety of views and to avoid specimen plants.

**Drainage.** Provide drainage control techniques that avoid any drainage flow above or across a trail.

**Setbacks.** Landscape setback standards are expressed as minimums. They should be as wide as possible.

**Plant Preservation.** Care should be given during trail construction to preserve existing vegetation in place.

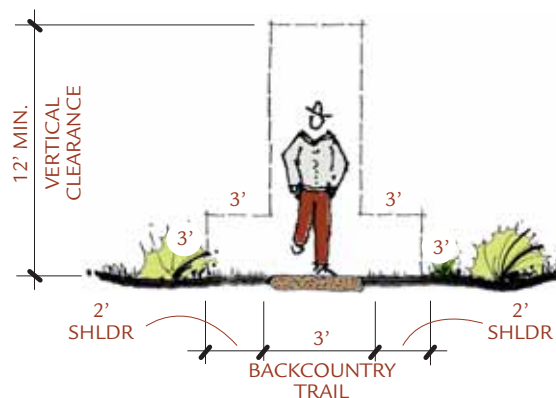
**Alignment.** The best horizontal alignment (how a trail looks from above) includes simple curves rather than straight sections with sharp turns.

**Passing Areas.** When in steep terrain, incorporate passing areas of 5 feet wide by 10 feet long in natural openings in the landscape.

**Switchbacks.** Where more than one switchback is necessary to climb steep grades, minimize the physical and visual impact by not stacking switchbacks along a slope face; spread them out.

**Landscape.** Landscaping shall be native. Water harvesting techniques should be integrated into designs wherever possible.

Width	Three feet	Turning Radius	Five-foot minimum
Shoulder	Minimum two-foot soft/mowed/six-inch maximum height herbaceous plants/native soil	Surface Material	Compacted native soil
		Running Grade	<5% = 1500' 5-8% = 800'-1500' 8-10% = 500'-800' >10% = max 500'
Vertical Clearance	12-foot minimum	Cross Slope	Two percent (5 percent maximum; 4 percent maximum at paved crossings)
Side Clearance	No vegetation or obstacles within a three-foot high by three-foot wide space each side. Three-foot minimum to signs, benches, or any vertical element.		
Thorny Plants	Minimum 10-foot clearance between trail edge and newly planted thorny plants. Align trail to avoid existing thorny plants wherever possible to minimize their removal.	Clearance to Trees	Strive to maintain six feet between trail edge and tree trunk. Cut trees and shrubs back to the trunk. To create more visual interest and slow users down, don't cut all vegetation back exactly the same distance.
Clearance to Trees	Minimum six feet (provide minimum ten-foot clearance between trees and sewer lines)		



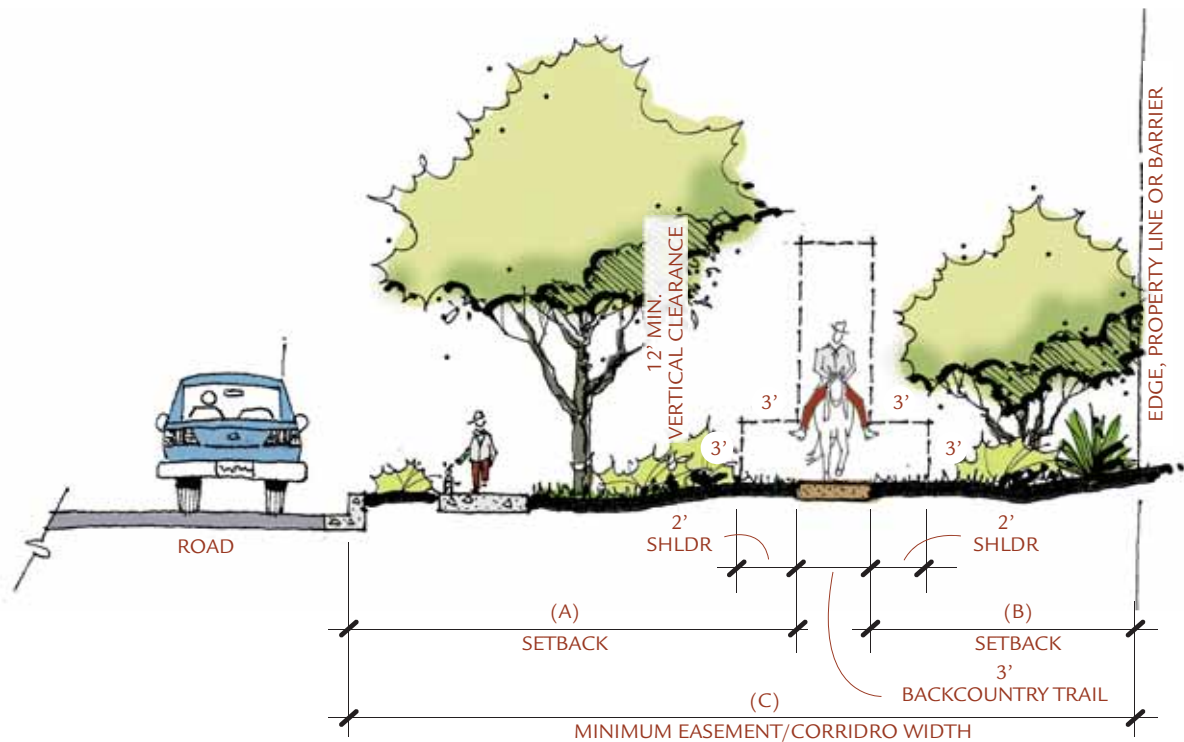
# Backcountry Trails

## Backcountry Trail Corridor Adjacent to a Road

Transportation Classification	Minimum Setback From Edge of Road Pavement and Trail Edge <sup>1</sup> (A)	Backcountry Trail Tread Width	Minimum Setback From Path Edge to Adjacent Barrier Edge or Property Line <sup>2</sup> (B)	Minimum Trail Easement/Corridor Width (C) = (A) + 3' + (B)
Freeway/Expressway (over 55 MPH)	30'	3'	12'	45'
Major/Minor Arterial and Collector Street (30-55 MPH)	20'	3'	12'	35'
Local Street (25 MPH and under)	6'	3'	6'	15'

1. Includes two-foot shoulder, three-foot high by three-foot wide vegetation clearance and sidewalk if required.

2. Increase width as needed in areas of steep or difficult terrain to accommodate switchbacks, avoidance of obstacles, etc.

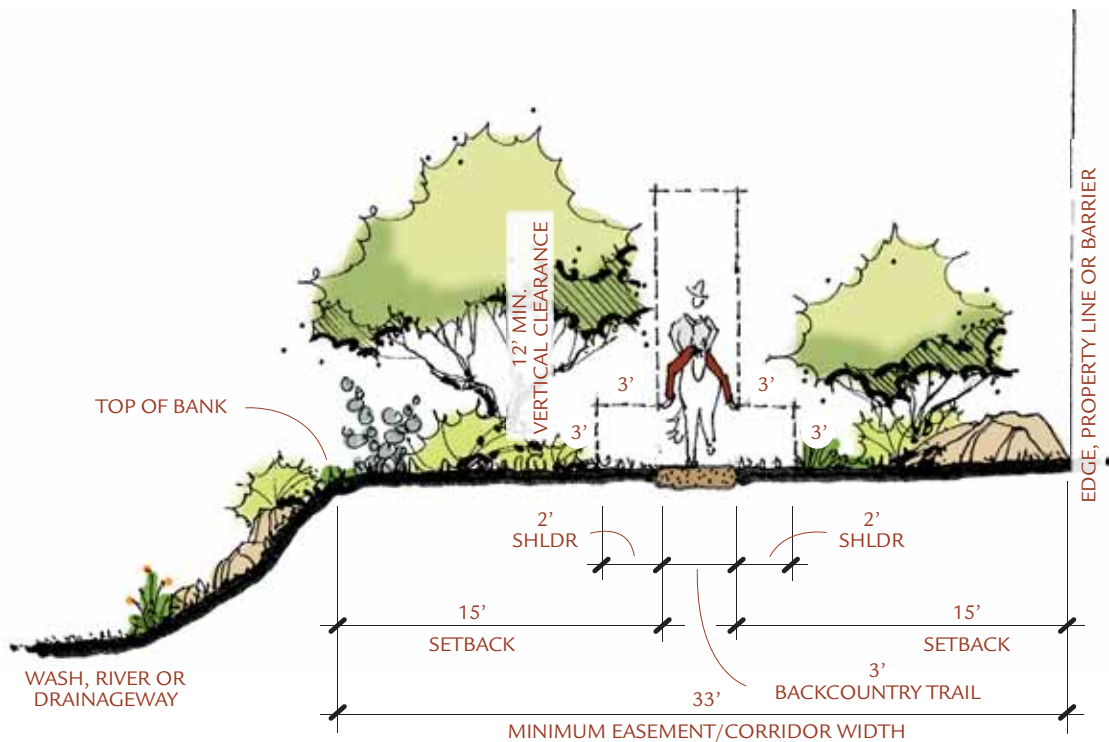


# Backcountry Trails

## Backcountry Trail Corridor Adjacent to a River or Drainageway

Backcountry Trail Tread Width	Setback From Trail Edge to Top of Adjacent Barrier Edge or Property Line <sup>1</sup>	Minimum Trail Easement/Corridor Width <sup>2</sup> = 3' + (2 x 15') <sup>2</sup>
3'	15'	33'

1. Includes two-foot shoulder and three-foot high by three-foot wide vegetation clearance each side.  
 2. Increase width as needed in areas of steep or difficult terrain to accommodate switchbacks, avoidance of obstacles, etc.

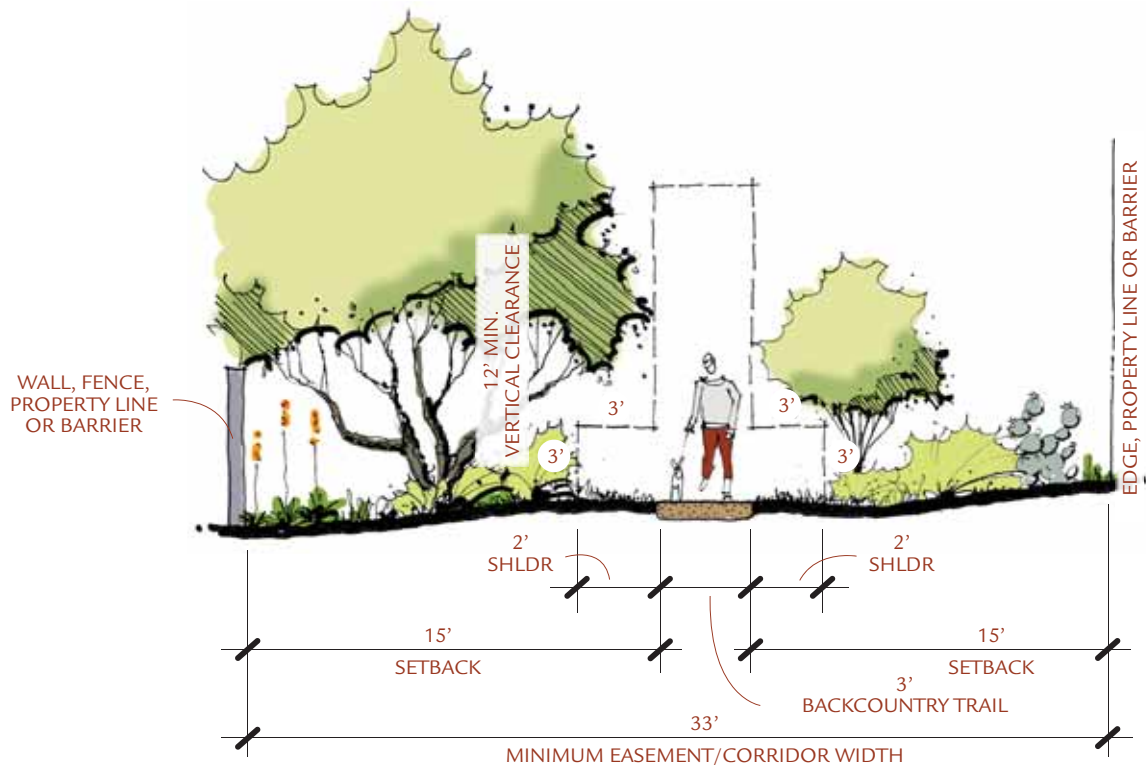


# Backcountry Trails

## *Backcountry Trail Corridor in an Open Space/Greenway (other than a river or drainageway)*

Backcountry Trail Tread Width	Setback From Trail Edge to Adjacent Barrier Edge or Property Line <sup>1</sup>	Minimum Trail Easement/Corridor Width <sup>2</sup> = 3' = (2' x 15') <sup>2</sup>
3'	15'	33'

1. Includes two-foot shoulder and three-foot high by three-foot wide vegetation clearance each side.  
 2. Increase width as needed in areas of steep or difficult terrain to accommodate switchbacks, avoidance of obstacles, etc.



# Paths

This paved facility is used by bicyclists, pedestrians, joggers, strollers, wheelchair users, in-line skaters, other non-motorized users, and anyone wanting a smooth and consistent surface. Paths are signed for various users, are ADA accessible (when less than five percent grades), and may also be used by small maintenance and emergency response vehicles.

Paths include an adjacent four-foot unpaved shoulder on one side to provide greater options for the diversity of non-motorized users from roller bladers, who prefer a paved surface, to joggers, who prefer an unpaved surface.

## DESIGN CONSIDERATIONS

**Corridor Width.** Secure as broad a corridor as possible to enhance the user experience.

**Landscape.** Landscaping is an opportunity to highlight and enhance regional and local character, therefore, landscaping shall be native and/or near native. Water harvesting techniques should be integrated into design wherever possible. Refer to local jurisdictions for specific approved plant lists.

**Respite Areas.** Provide respite areas with seat walls, plazas, and other design features at logical locations along path corridors. Compliment amenities at entry nodes and trailheads.

**Driveway Crossings.** Limit driveway path crossings to a maximum of every quarter-mile.

**Signs.** Include high-quality signs and interpretive exhibits where appropriate. Sign vehicular crossings of the paths with stop and warning signs to help ensure user safety.

**Freeway Adjacency.** Provide a minimum four-foot high landscaped berm between freeways and paths to enhance the feeling of separation.

**Connectivity.** Enhance connectivity to community features, such as parks, schools, shopping, offices, and neighborhoods by supplementing the recommendations of this plan and provide additional linked routes and connections.

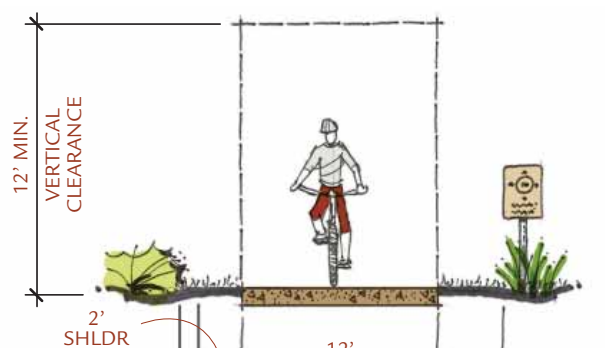
**Sight Lines.** Lay out trails to maximize visibility of approaching trail users, thereby increasing reaction time and minimizing conflicts.

**Setbacks.** Landscape setback standards are expressed as minimums. They should be as wide as possible.

**References.** See AASHTO's 1999 *Guide for the Development of Bicycle Facilities*, page 33, "Shared Use Paths" for more information.

Width	Twelve feet paved plus four feet unpaved on one side.	Running Grade	6% up to 800 feet 7% up to 400 feet 8% up to 300 feet 9% up to 200 feet 10% up to 100 feet 11% and greater up to 50 feet
Shoulder	Minimum two-foot soft/mowed on side opposite unpaved four feet		
Vertical Clearance	12-foot minimum		
Side Clearance	Three feet high by three feet wide space on side of four-foot shoulder for vegetation or obstacles. Three-foot minimum to signs, benches, or any vertical element.		
Thorny Plants	Minimum 10-foot clearance between trail edge and newly planted thorny plants. Align trail to avoid existing thorny plants wherever possible to minimize their removal.	Horizontal Alignment	Refer to AASHTO Guidelines. Gentle meander acceptable with minimum 200-foot radius.
Clearance to Trees	Minimum six feet (provide minimum ten-foot clearance between trees and sewer lines)		
Bicycle Design Speed	20 mph; 30 mph when downgrade exceeds 4% or with strong prevailing tailwinds		
Surface Material	Concrete or asphalt for paved portion; one-quarter inch minus decomposed granite for unpaved portion		

1 Anything above 5% is not considered accessible per ADA. Grades above 5% should only occur where terrain dictates.



The diagram illustrates a cross-section of a shared-use path. A person is riding a bicycle on a paved section that is 12 feet wide. To the left of the paved section is a 2-foot shoulder. To the right is a 4-foot shoulder. A sign is visible on the right side of the path. The diagram also shows a 12-foot minimum vertical clearance over the path.

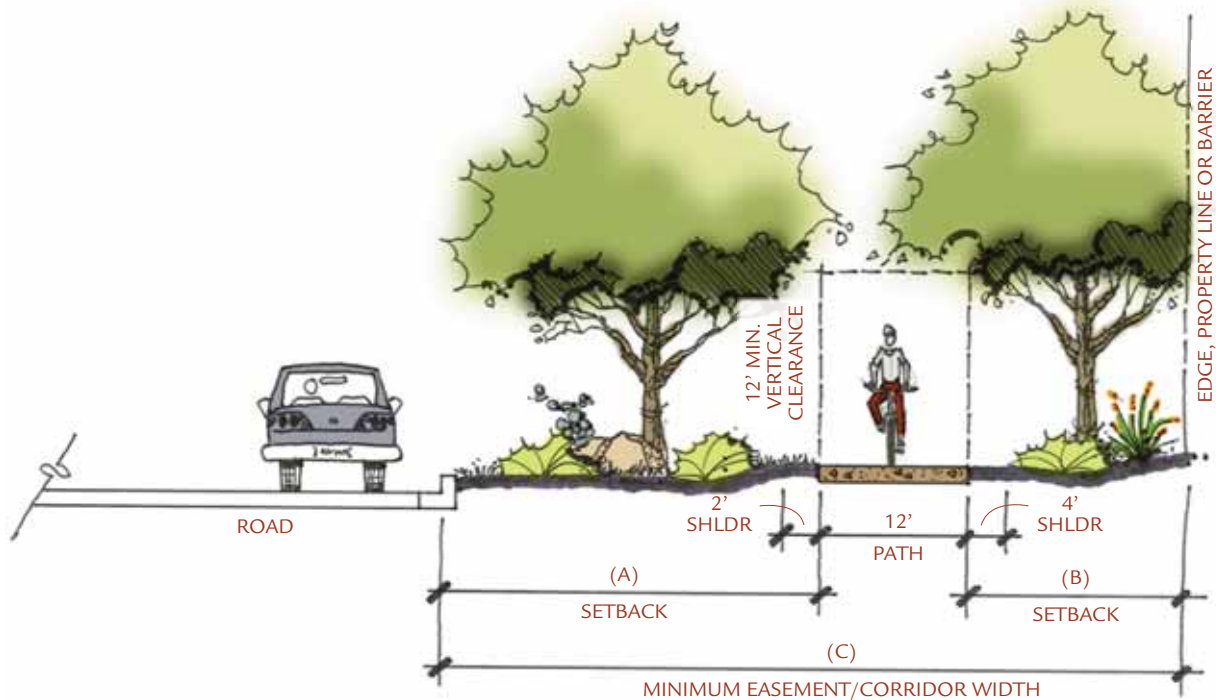
# Paths

## Path Corridor Adjacent to a Road

Transportation Classification	Minimum Setback From Edge of Road Pavement to Path Edge <sup>1</sup> (A)	Path Width <sup>2</sup>	Minimum Setback From Path Edge to Adjacent Barrier Edge or Property Line <sup>3</sup> (B)	Minimum Path Easement/Corridor Width <sup>4</sup> (C) = (A) + 12' + (B)
Freeway/Expressway (over 55 MPH)	30'	12'	12'	54'
Major/Minor Arterial and Collector Street (30-55 MPH)	12'	12'	12'	36'
Local Street (25 MPH and under)	6'	12'	6'	24'

1. Includes two-foot shoulder/vegetation clearance.  
 2. Current minimum path width standards vary by jurisdiction in Pima County i.e., Pima County and the City of Tucson standards are 12'-15', the Town of Oro Valley standard is 10'. Maintain minimum path standard per jurisdiction.  
 3. Includes four-foot shoulder.  
 4. Increase width as needed in areas of steep or difficult terrain to accommodate switchbacks, avoidance of obstacles, improve sight lines, etc.

NOTE: Where paths parallel a road, consider deleting the separate sidewalk, thereby creating a larger landscape buffer between the path and road and decreasing costs.





# Paths

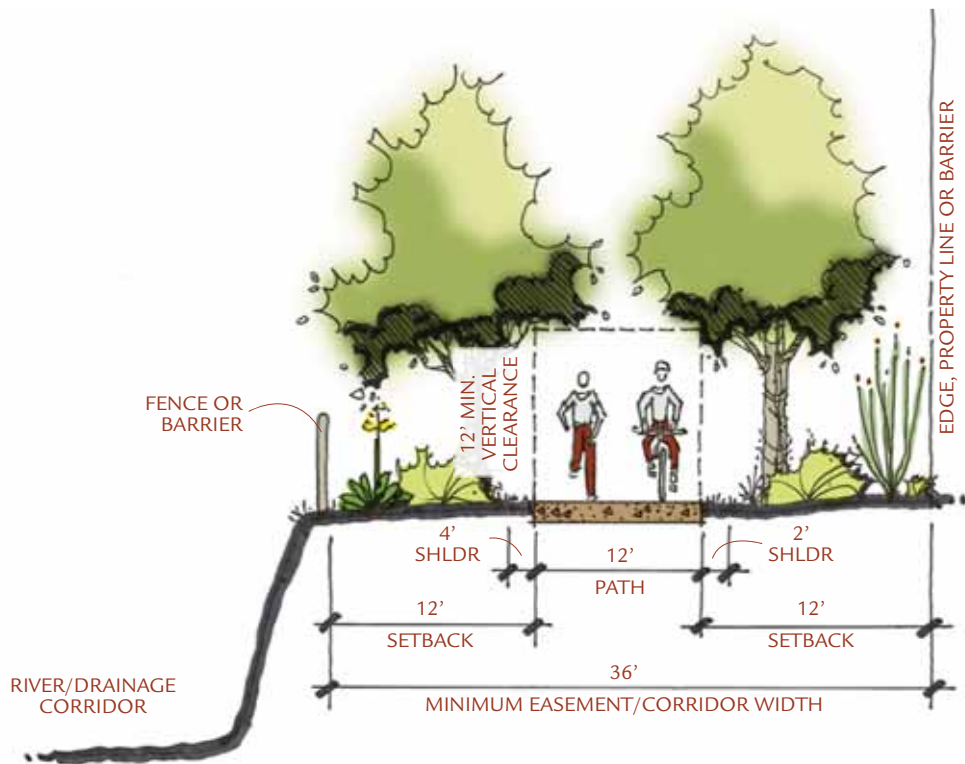
## Path Corridor Adjacent to a River or Drainageway

Path Width <sup>1</sup>	Setback From Path Edge to Adjacent Barrier Edge or Property Line <sup>2</sup>	Minimum Path Easement/Corridor Width <sup>3</sup> = 12' + (2 X 12')
12'	12'	36'

1. Current minimum path width standards vary by jurisdiction in Pima County, i.e. Pima County and the City of Tucson standards are 12'-15', the Town of Oro Valley standard is 10'. Maintain minimum path standard per jurisdiction.

2. Includes four-foot wide shoulder on the drainageway side and two-foot shoulder on the other side.

3. Increase width as needed in areas of steep or difficult terrain to accommodate switchbacks, avoidance of obstacles, improve sight lines, etc.

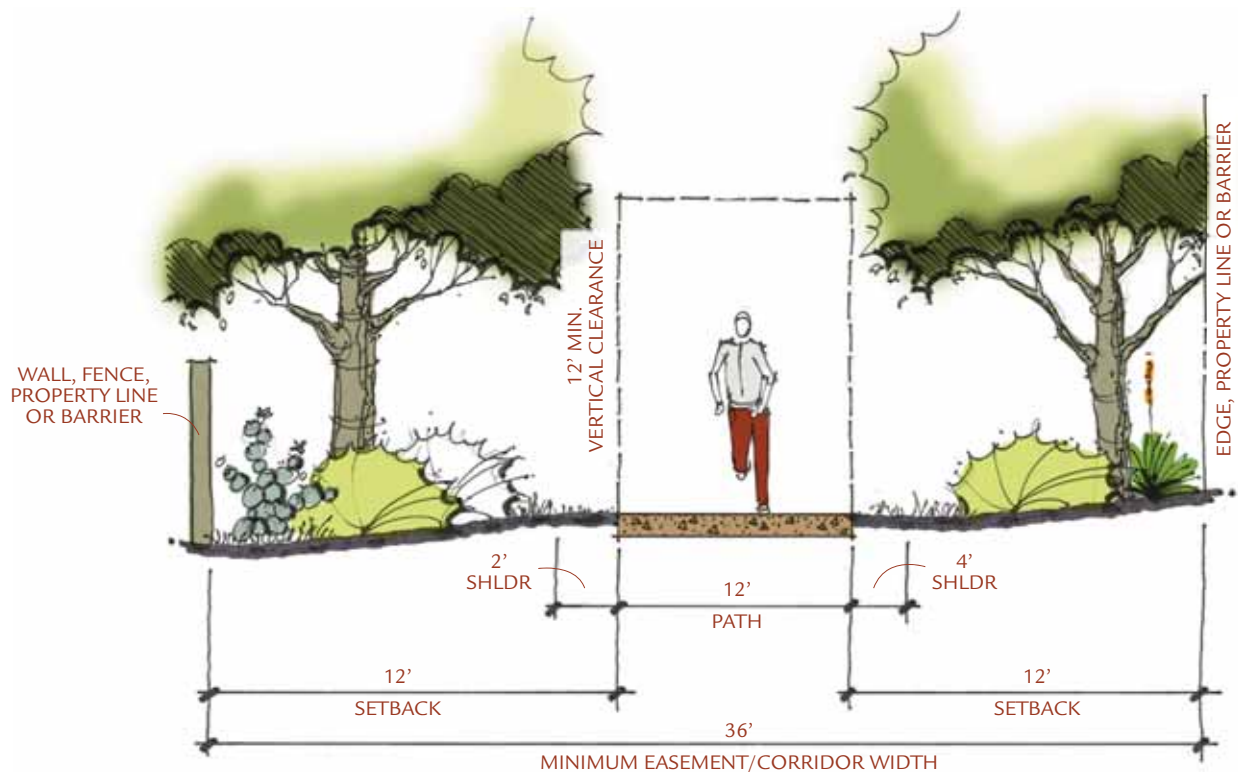


# Paths

## *Path Corridor in an Open Space/Greenway (other than a river or drainageway)*

Path Width <sup>1</sup>	Setback From Path Edge to Adjacent Barrier Edge or Property Line <sup>2</sup> (B)	Minimum Path Easement/Corridor Width <sup>3</sup> = 12' + (2 X 12')
12'	12'	36'

<sup>1</sup>. Current minimum path width standards vary by jurisdiction in Pima County, i.e. Pima County and the City of Tucson standards are 12'-15', the Town of Oro Valley standard is 10'. Maintain minimum path standard per jurisdiction.  
<sup>2</sup>. Includes four-foot shoulder.  
<sup>3</sup>. Increase width as needed in areas of steep or difficult terrain to accommodate switchbacks, avoidance of obstacles, improve sight lines, etc.



# River Parks

River Park corridors have a separated and divided path and trail on both sides of the river, offering the maximum opportunities for non-vehicular transportation. This separated and divided path/trail combination is similar to the Divided Urban Pathway shown in the current Pima County standards.

## DESIGN CONSIDERATIONS

**Corridor Width.** The minimum corridor width for River Parks is 100 feet on both river banks. However, additional space is recommended wherever possible to help enhance the quality and impact of the river park system, reduce the urban heat island effect, and allow for the restoration of the wildlife habit that once existed along the edges of the community's major watercourses.

**Encroachment.** New development shall not encroach into River Park corridors.

**Dedication.** New development adjacent to River Park corridors shall dedicate the 100-foot minimum corridor on their side of the river (or both if applicable) and construct the amenities consistent with this plan.

**Design Integration.** Urban design that integrates residential and commercial projects into the River Park corridor is welcome and shall be strongly encouraged. Development should not “turn its back” on River Parks, thereby creating an unsightly and undesirable condition of loading docks, service areas, and dumpsters in view of the River Parks.

**Combined Public Corridor.** Where opportunities occur to add publicly-owned property adjacent to River Parks, such as paralleling road right-of-way or public park, these lands should be combined in to one large public corridor.

**Connectivity.** Enhance connectivity to community features, such as parks, schools, commercial centers, offices, and neighborhoods by supplementing the recommendations of this plan and provide additional linked routes and connections to the River Park system.

**Edge Porosity.** The concept of “porosity” shall be integrated into River Park design, with many opportunities to enter and exit the corridor. This will enhance safety, convenience, and connectivity.

**Bridges.** Bridges should be as flat as possible so as not to block sight lines and enhance user safety.

**Underpasses.** Wherever possible, separate equestrian underpasses under bridges should be provided for safety reasons.

**Landscape.** Landscaping is an opportunity to highlight and enhance regional and local character, therefore, landscaping shall be native and/or near native. Water harvesting techniques should be integrated into design wherever possible. Refer to local jurisdictions for specific approved plant lists.

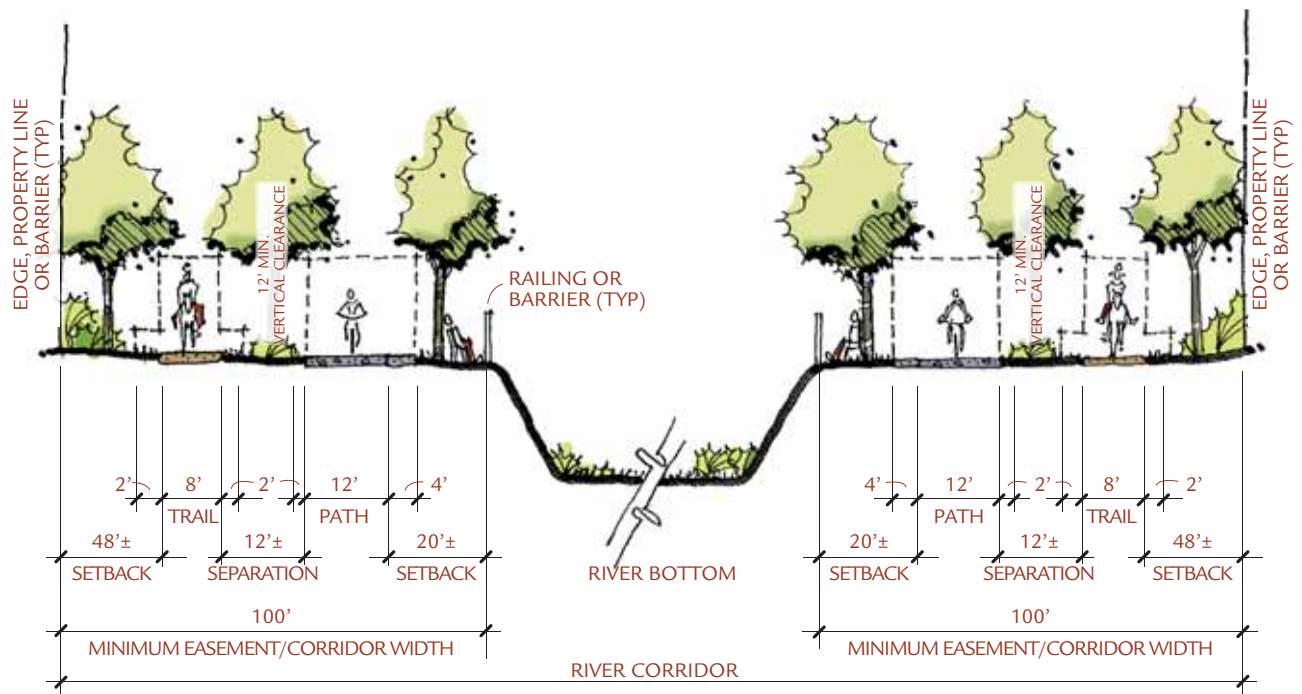
**Respite Areas.** Provide respite areas with seat walls, plazas, and other design features at logical locations along River Parks. Compliment amenities at entry nodes and trailhead.

**References.** See Path, Trail, and Backcountry Trail Design Considerations for additional information.

Corridor Width	100 feet minimum, both river banks
Path/Trail	Path and trail corridor on both sides of river
Vertical Clearance	12-foot minimum
Side Clearance	Three feet high by three feet wide each side of trail. Paths to have a four-foot shoulder on one side and a two-foot shoulder on the other side. (See Path and Trail Standards.) 24 inches from nearest pipe rails
Thorny Plants	Minimum 10-foot clearance between trail edge and newly planted thorny plants. Align trail to avoid existing thorny plants wherever possible to minimize their removal.
Clearance to Trees	Minimum six feet (provide minimum ten-foot clearance between trees and sewer lines)
Surface Material	(see Path and Trail standards)
Design Speed	(see Path and Trail standards)
Running Grade	(see Path and Trail standards)
Horizontal Alignment	(see Path and Trail standards)
Signs	Wayfinding, directional, and interpretive

# River Parks

## RIVER PARK CORRIDOR



# Greenways

Greenways are a corridor that typically features a path and trail, preserved native vegetation and/or landscape plantings, and pedestrian amenities. Greenways typically follow washes or drainageways but can also be adjacent to roads. If the greenway is along a wash, the path and trail can be together on one side or one on each side of the wash. Greenways are similar to River Parks except that right-of-way width is less, features are less extensive, and at-grade crossings of streets are more common.

## DESIGN CONSIDERATIONS

**Corridor Width.** The minimum corridor width for Greenways is 50 feet. However, additional space is recommended wherever possible to help enhance the quality and impact of the greenway system, reduce the urban heat island effect, and allow for the restoration of the wildlife habit that once existed along the edges of the community's major watercourses.

**Encroachment.** New development shall not encroach into Greenway corridors.

**Dedication.** New development adjacent to Greenway corridors shall dedicate the 50-foot minimum corridor and construct the amenities consistent with this plan.

**Design Integration.** Urban design that integrates residential and commercial projects into the Greenway corridor is welcome and shall be strongly encouraged. Development should not “turn its back” on Greenway, thereby creating an unsightly and undesirable condition of loading docks, service areas, and dumpsters in view of the Greenways.

**Combined Public Corridor.** Where opportunities occur to add publicly-owned property adjacent to Greenways, such as paralleling road right-of-way or public park, these lands should be combined in to one large public corridor.

**Connectivity.** Enhance connectivity to community features, such as parks, schools, commercial centers, offices, and neighborhoods by supplementing the recommendations of this plan and provide additional linked routes and connections to the Greenway.

**Edge Porosity.** The concept of “porosity” shall be integrated into Greenway design, with many opportunities to enter and exit the corridor. This will enhance safety, convenience, and connectivity.

**Bridges.** Bridges should be as flat as possible so as not to block sight lines and enhance user safety.

**Underpasses.** Wherever possible, separate equestrian underpasses under bridges should be provided for safety reasons.

**Landscape.** Landscaping is an opportunity to highlight and enhance regional and local character, therefore, landscaping shall be native and/or near native. Water harvesting techniques should be integrated into design wherever possible. Refer to local jurisdictions for specific approved plant lists.

**Respite Areas.** Provide respite areas with seat walls, plazas, and other design features at logical locations along River Parks. Compliment amenities at entry nodes and trailhead.

**References.** See Path, Trail, and Backcountry Trail Design Considerations for additional information.

Corridor Width	50 feet minimum
Path/Trail	Path and trail combined in one corridor
Vertical Clearance	12-foot minimum
Side Clearance	Three feet high by three feet wide each side of trail. Paths to have a four-foot shoulder on one side and a two-foot shoulder on the other side. (See Path and Trail Standards.) 24 inches from nearest pipe rails
Thorny Plants	Minimum 10-foot clearance between trail edge and newly planted thorny plants. Align trail to avoid existing thorny plants wherever possible to minimize their removal.
Clearance to Trees	Minimum six feet (provide minimum ten-foot clearance between trees and sewer lines)
Surface Material	(see Path and Trail standards)
Design Speed	(see Path and Trail standards)
Running Grade	(see Path and Trail standards)
Horizontal Alignment	(see Path and Trail standards)
Crossings	Limit driveway crossings to a maximum of every quarter-mile.
Signs	Wayfinding, directional, and interpretive

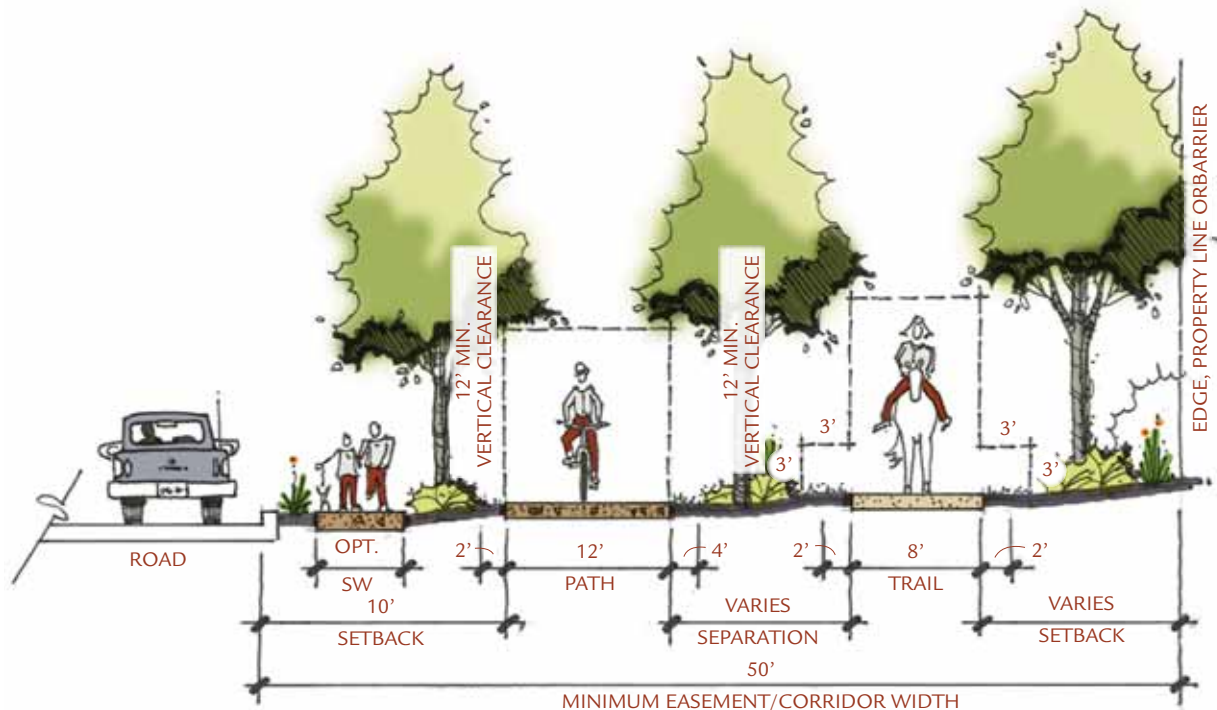


# Greenways

## Greenway Corridor With a Trail and Path Adjacent to a Road

Minimum Setback From Edge of Road Pavement to Path <sup>1</sup>	Path Width <sup>2</sup>	Setback Between Path and Trail <sup>3</sup>	Trail Tread Width	Setback From Trail Edge to Adjacent Barrier Edge or Property Line <sup>4</sup>	Minimum Greenway Easement/Corridor Width <sup>5</sup>
10'	12'	Varies	8'	Varies	50'

1. Includes two-foot shoulder and optional sidewalk. Consider deleting the separate sidewalk, thereby creating a larger landscape buffer between the path and road and decreasing costs.  
 2. Current minimum path width standards vary by jurisdiction in Pima County, i.e., Pima County and the City of Tucson standards are 12'-15', the Town of Oro Valley standard is ten feet. Maintain minimum path standard per jurisdiction.  
 3. Includes four-foot shoulder, two-foot shoulder, and three-foot high by three-foot wide vegetation clearance for the trail side.  
 4. Includes two-foot shoulder and three-foot high by three-foot wide vegetation clearance.  
 5. Minimum corridor width for Greenways is 50' unless an exception is approved by the responsible jurisdiction representative to accommodate site constraints.



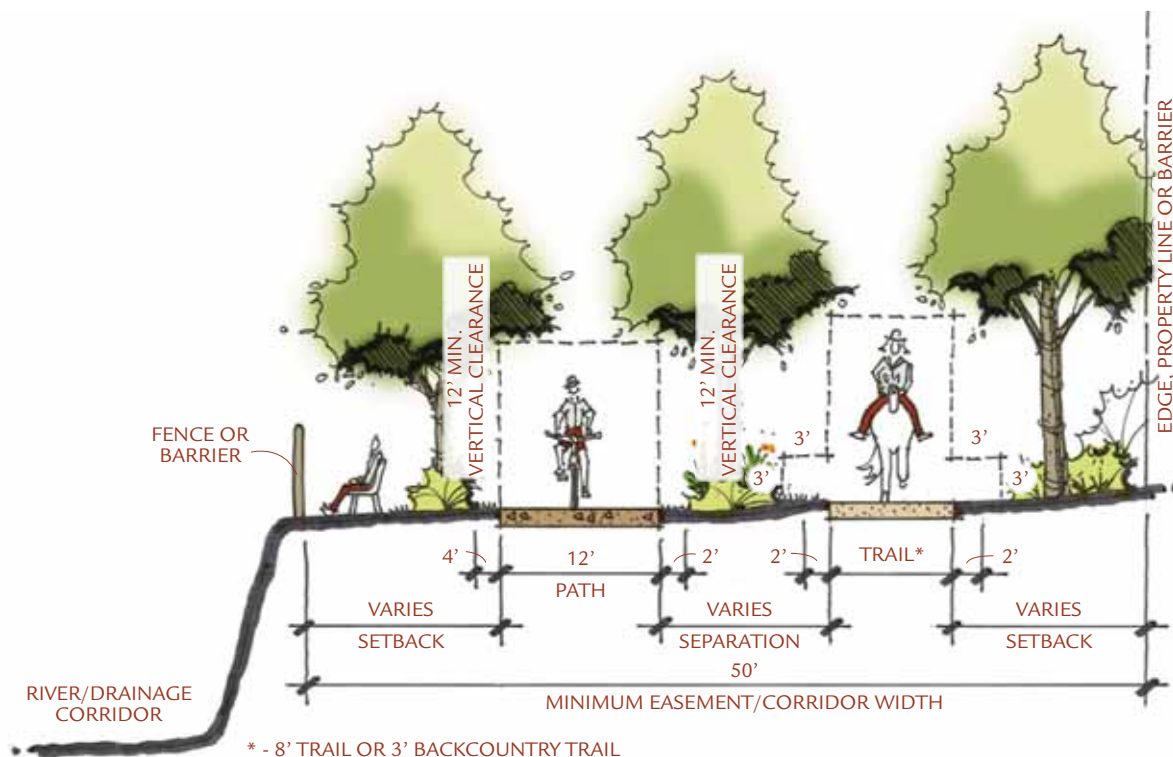


## Greenways

### *Greenway Corridor With a Trail and Path Adjacent to a Drainageway/Wash*

Setback From Adjacent Barrier at Top of Bank, or Top of Bank to Path <sup>1</sup>	Path Width <sup>2</sup>	Setback Between Path and Trail <sup>3</sup>	Trail Tread Width	Setback From Trail Edge to Adjacent Barrier Edge or Property Line <sup>4</sup>	Minimum Greenway Easement/Corridor Width <sup>5</sup>
Varies	12'	Varies	8' Trail 3' Backcountry Trail	Varies	50'

1. Includes four-foot wide shoulder.
2. Current minimum path width standards vary by jurisdiction in Pima County. i.e., Pima County and the City of Tucson standard are 12'-15', the Town of Oro Valley standard is 10'. Maintain minimum path standard per jurisdiction.
3. Includes two-foot shoulder for trail and path and three-foot high by three-foot wide vegetation clearance for the trail side.
4. Includes two-foot shoulder and three-foot high by three-foot wide vegetation clearance.
5. Minimum corridor width for Greenways is 50' unless an exception is approved by the responsible jurisdiction representative to accommodate site constraints.

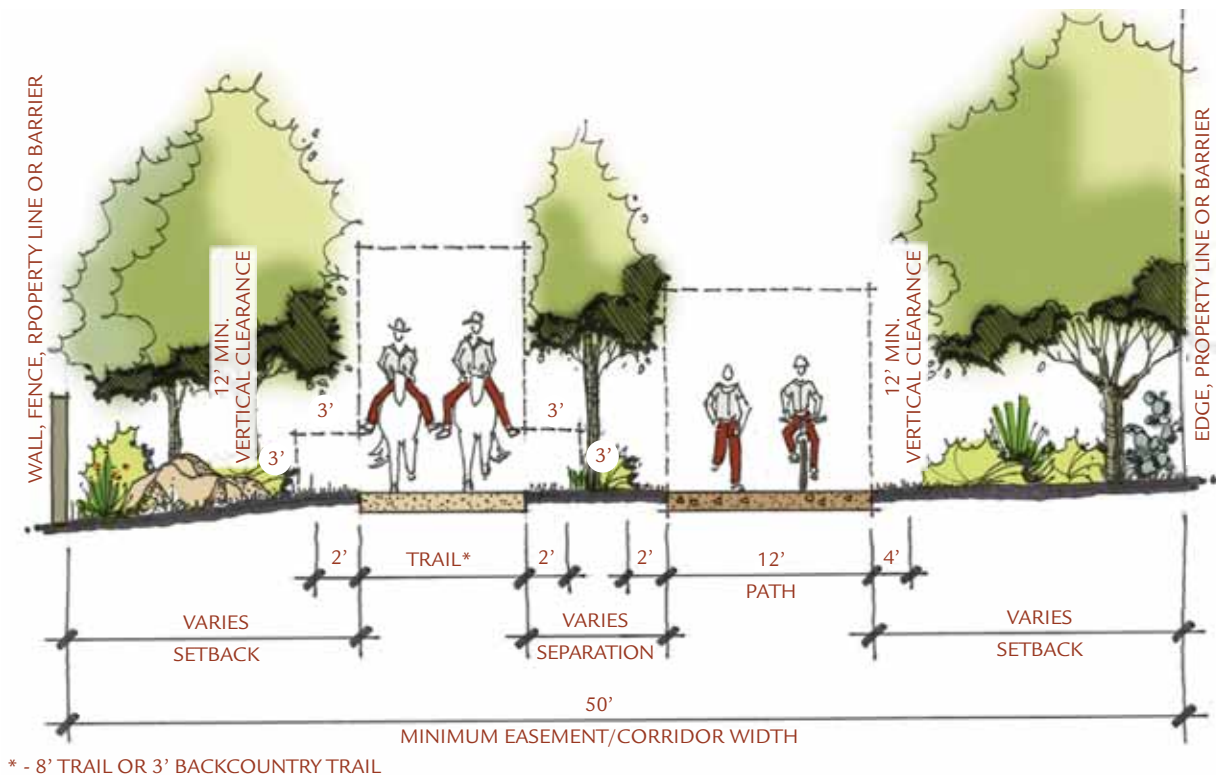


## Greenways

### *Greenway Corridor With a Trail and Path in an Open Space Area (other than a drainageway, wash, or along a road)*

Setback From Adjacent Barrier at Top of Bank, or Top of Bank to Path <sup>1</sup>	Trail TreadWidth <sup>2</sup>	Setback Between Path and Trail <sup>3</sup>	Path Width	Setback From Trail Edge to Adjacent Barrier Edge or Property Line <sup>4</sup>	Minimum Greenway Easement/Corridor Width <sup>5</sup>
Varies	8' Trail 3' Backcountry Trail	Varies	12'	Varies	50'

1. Includes two-foot shoulder and three-foot by three-foot wide vegetation clearance.  
 2. Includes two-foot shoulder for trail and path and three-foot high by three-foot wide vegetation clearance for the trail side.  
 3. Current minimum path width standards vary by jurisdiction in Pima County. i.e., Pima County and the City of Tucson standard are 12'-15', the Town of Oro Valley standard is 10'. Maintain minimum path standard per jurisdiction.  
 4. Includes four-foot shoulder.  
 5. Minimum corridor width for Greenways is 50' unless an exception is approved by the responsible jurisdiction representative to accommodate site constraints.



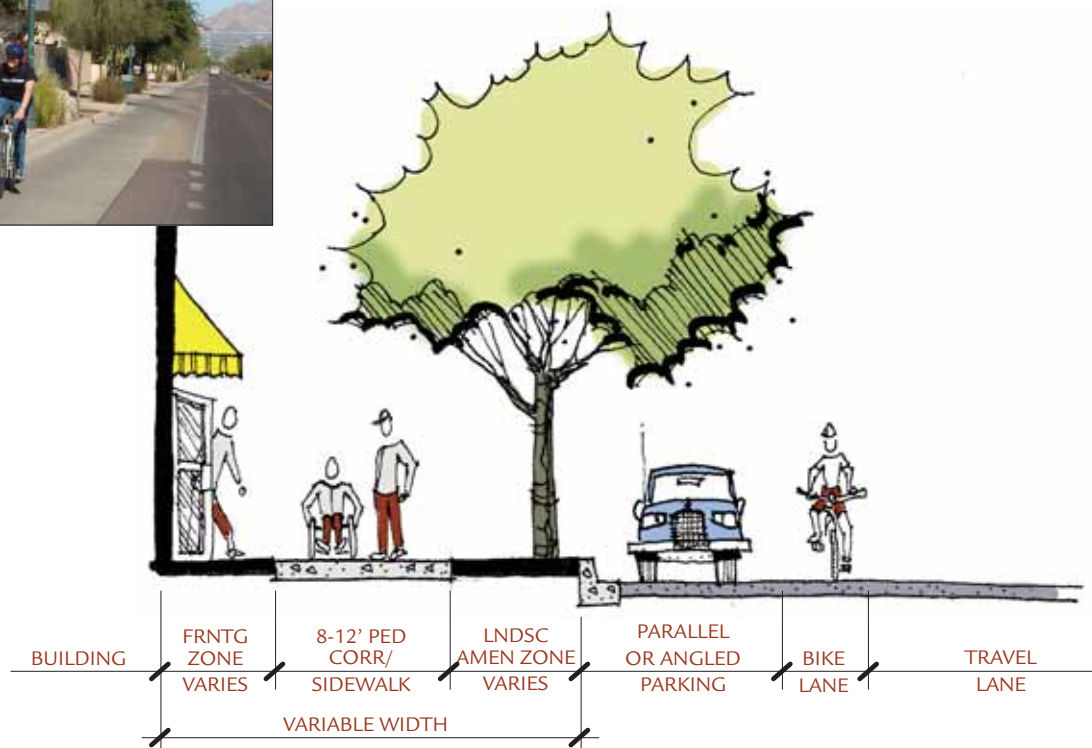
## Enhanced Bicycle/Pedestrian Corridors

Enhanced Bicycle/Pedestrian Corridors are a special designation for areas where the ability to link regional and community destinations via non-vehicular transportation modes needs to occur on city streets in denser, mixed-use areas. Enhanced Bicycle/Pedestrian Corridors generally follow existing local or collector streets that carry a relatively low volume of automobile traffic. They are intended to enhance safety and be attractive corridors that encourage bicycle and pedestrian use. Essential improvements include continuous bicycle lanes and continuous sidewalks with ramps. Landscape plantings, street furniture, transit shelters (where appropriate), and public art should also be included along these corridors. Tucson's Mountain Avenue was developed as a prototype for this type of corridor.

<b>Pedestrian Corridor Width</b>	Eight to twelve feet wide
<b>Pedestrian Corridor Surface Material</b>	Smooth, slip-resistant, no cracks or indents higher or wider than 1/4", or steep grade
<b>Bicycle Lane Width</b>	Per jurisdictional standards. Typically between four and six feet.
<b>Shade</b>	Minimum 75 percent coverage (combination of trees and structures) along route and at gathering nodes
<b>Signs</b>	Wayfinding and directional
<b>Traffic Signals</b>	Timed for a walking speed of two and eight-tenths feet per second
<b>Other</b>	<ul style="list-style-type: none"> <li>• Clear of protruding objects</li> <li>• All changes in elevation have ramps</li> <li>• Pedestrian crossings of vehicular traffic have a defined crosswalk</li> <li>• Incorporate public art into the design</li> <li>• Pocket parks and other planting opportunities</li> <li>• Transit stations with amenities</li> <li>• Parallel or angled parking to buffer sidewalk from street where appropriate</li> </ul>



Mountain Avenue



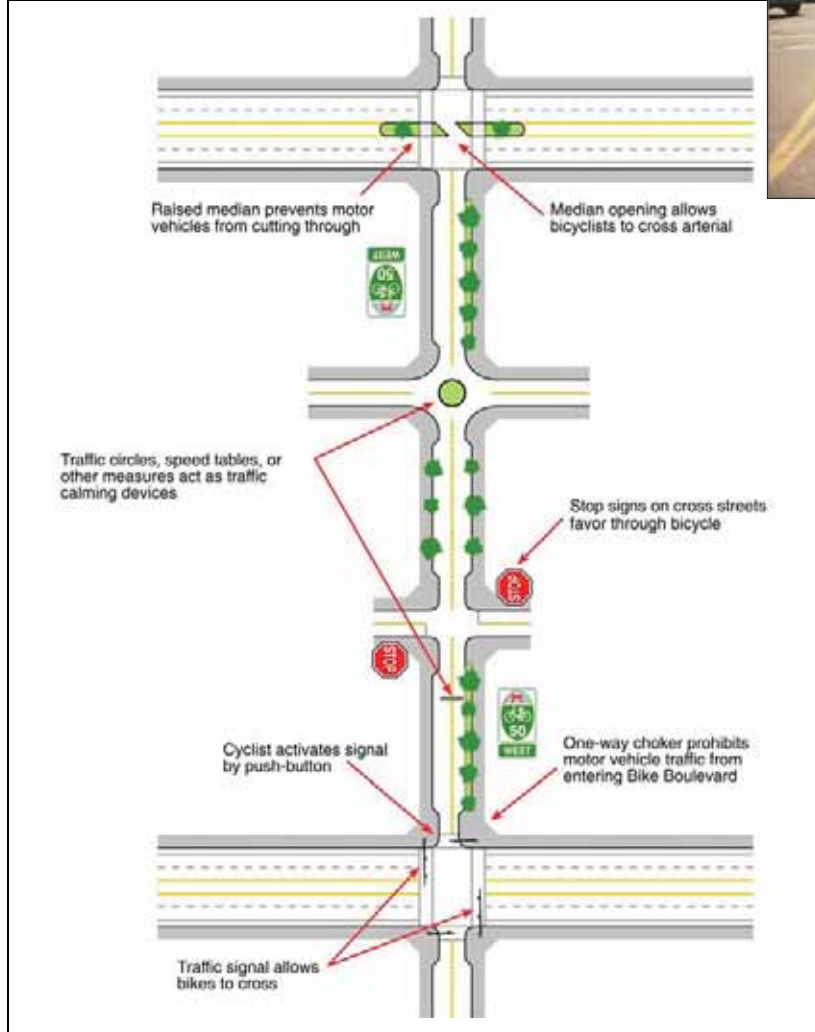
# Bicycle Boulevards

Bike Boulevards are corridors that typically follow a local street or streets with a low volume of automobile traffic. Local automobile traffic is allowed on these streets but traffic controls are designed to give priority to bicycles. Features such as TOUCAN crossings (see Glossary and page 41 for information on TOUCANS) signaling systems are used at intersections where appropriate. Bike boulevards are predominantly a transportation improvements and are usually funded using transportation dollars; however, they are discussed in this plan because they are a valuable component of the trail system so should also be considered for trails funding.

## May include

- Traffic circles and speed humps to slow down motorized vehicles
- Changing the directions of stop signs to favor bicycle traffic
- Specialized bicycle crossings at crossings of major roadways
- Landscaping
- Wayfinding and directional signs
- Themed design
- Public art incorporated into design

## GRAPHIC



Innovative Bicycle Treatments, ITE Web Seminar, 2006. Matthew D. Ridgway. Photo from Palo Alto, CA.

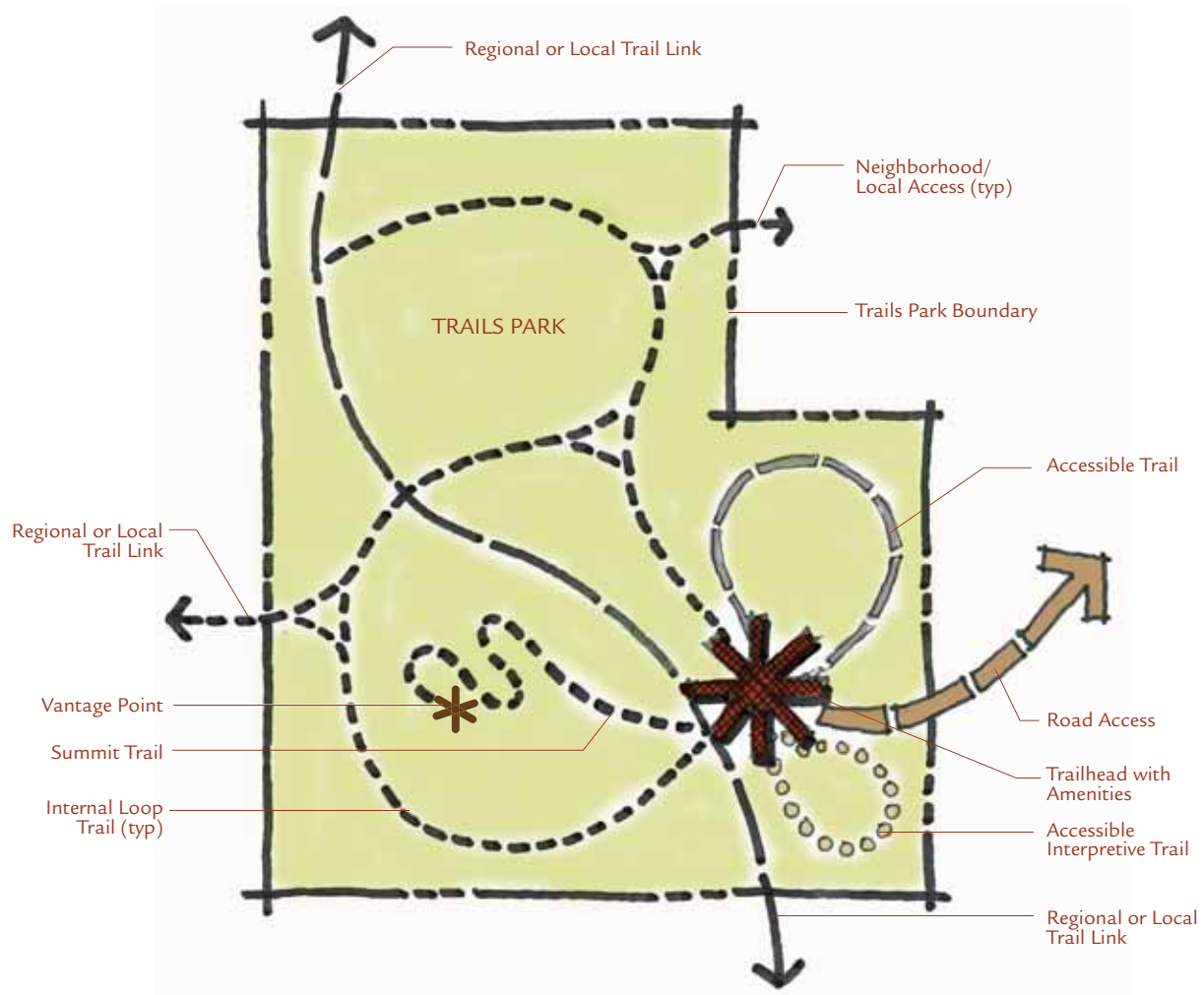
Innovative Bicycle Treatments, Student Supplement, ITE, 2002. Jumana M. Nabti, Matthew D. Ridgway



# Trails Parks

Trails Parks are large, primarily desert open space properties located in the developed or developing areas of the region to provide convenient access to trail-focused recreation. Trails parks contain multiple looped trails and a variety of trail experiences and amenities. Locating trails parks in developed areas provides convenient access to trails for a large number of users..

Components	<ul style="list-style-type: none"> <li>• Trailhead Facilities <ul style="list-style-type: none"> <li>- Kiosks</li> <li>- Trail signs</li> <li>- Drinking fountains</li> <li>- Ramadas</li> <li>- Restrooms</li> </ul> </li> <li>• Accessible trails</li> <li>• Accessible interpretive trail with signs noting its accessibility</li> <li>• Looped trail system</li> <li>• Variety of difficulty and terrain</li> <li>• Neighborhood access</li> <li>• Parking</li> <li>• Public art incorporated into design</li> </ul>
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# Trailheads, Entry Nodes, and Boundary Access Points

There are several types of improved access points which ensure public access to the path and trail network while enhancing safety and user experiences. Most importantly, the overall success of a trail/path system largely depends on the ease with which people can access the facilities, either by walking, riding or biking from home or by driving to convenient, safe, and well-equipped trailheads. The types of access points in the Pima Regional Trail System are Trailheads, Entry Nodes, and Boundary Access Points.

## DESIGN CONSIDERATIONS

### Standard Trailheads

- Features common to all standard trailheads include:
  - Paved parking
  - Picnic ramadas
  - Trail maps, information, and regulations
  - Restrooms
  - Shade

### Trailheads with Equestrian Facilities

- All features identified for Standard Trailhead plus:
  - One-quarter inch minus decomposed granite surface for equestrian parking and off-loading areas
  - Separation of equestrians from other users in parking and trail access
  - Perimeter fencing and self-closing gates at pedestrian and trail entrances near streets
  - Pull-through, circular roadway, and parking areas for vehicles pulling horse trailers

### The Neighborhood Equestrian Park and Trailhead

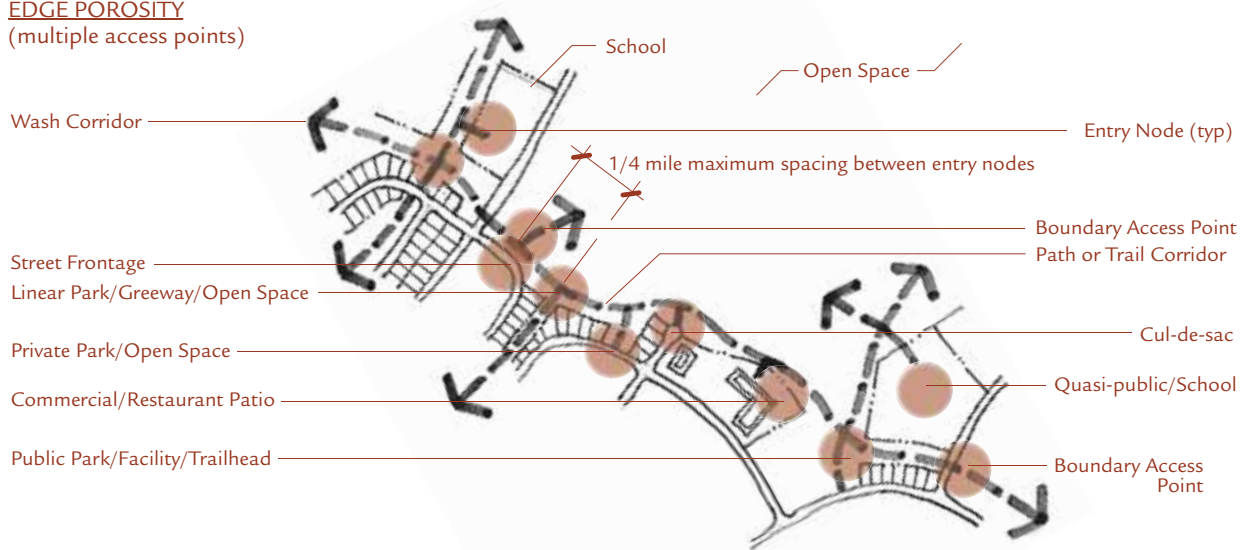
- This combined park and trailhead category provides trail access while also enhancing equestrian areas by providing close-to-home facilities for riding and training horses, as well as serving as a location for small scale equestrian events and activities. Brandi Fenton Park is an example of this type of facility.

### Entry Nodes

- Entry nodes should be located at approximately one-quarter-mile intervals along corridors, a distance typically cited as a reasonable walking distance to a destination. Entry nodes do not include parking facilities. Entry nodes include amenities to improve comfort and provide helpful information to users such as benches, signs, water, shade, bike racks, and optional lighting. Site specific designs can also create or enhance neighborhood identity, incorporate public art, and/or provide cultural or environmental interpretation opportunities.

### EDGE POROSITY

(multiple access points)





# Trailheads, Entry Nodes, and Boundary Access Points

## Standard Trailhead

Trailheads are located along all types and levels of trail and path corridors. They provide parking spaces, as well as non-vehicular, access to local and regional destinations and open space areas. There are two proposed Standard Trailheads - large and small. They can be located within neighborhood, community, or trails parks or can be built as separate facilities. See the Trail Standards section for more information. A Standard Trailhead provides trail and path users with convenient parking, informational signs, and other amenities associated with a jumping off point for the path and trail system.

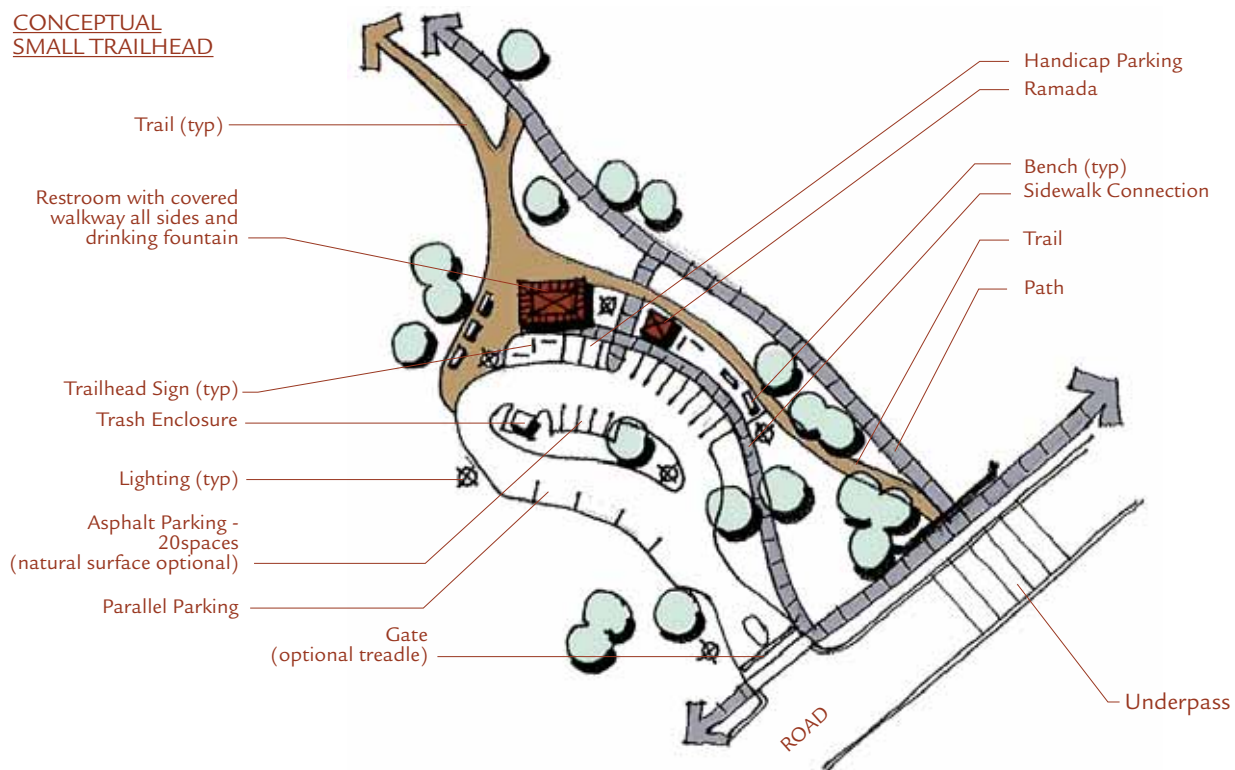
General Size	Parking Spaces <sup>1</sup>	Restrooms	Area and Amenity Lighting	General Amenities	Signs
Small (TH[S])	6-30 std.	Yes	Yes	Benches, drinking water, landscape/shade structure/picnic ramada, trash disposal, bike racks	Rules/notices, general and interpretive signs, location map
Large (TH[L])	31-60 std.	Yes	Yes	Benches, drinking water, landscape/shade structure/picnic ramada, trash disposal, bike racks	Rules/notices, general and interpretive signs, location map

1. Parking spaces are in addition to number of required parking spaces for combined park site.

Note: The facilities and improvements noted above are recommended and will typically be required for the trailhead types listed. Final determination of the scope of trailhead development will be determined by the applicable jurisdiction or agency parks and recreation department. Modifications to these standards may be proposed in response to:

- Existing conditions associated with the approved site
- Anticipated demand for various types of public use
- The economic cost of utility service extensions
- Consistency with adopted resource management plans, park master plans, and/or other adopted planning documents

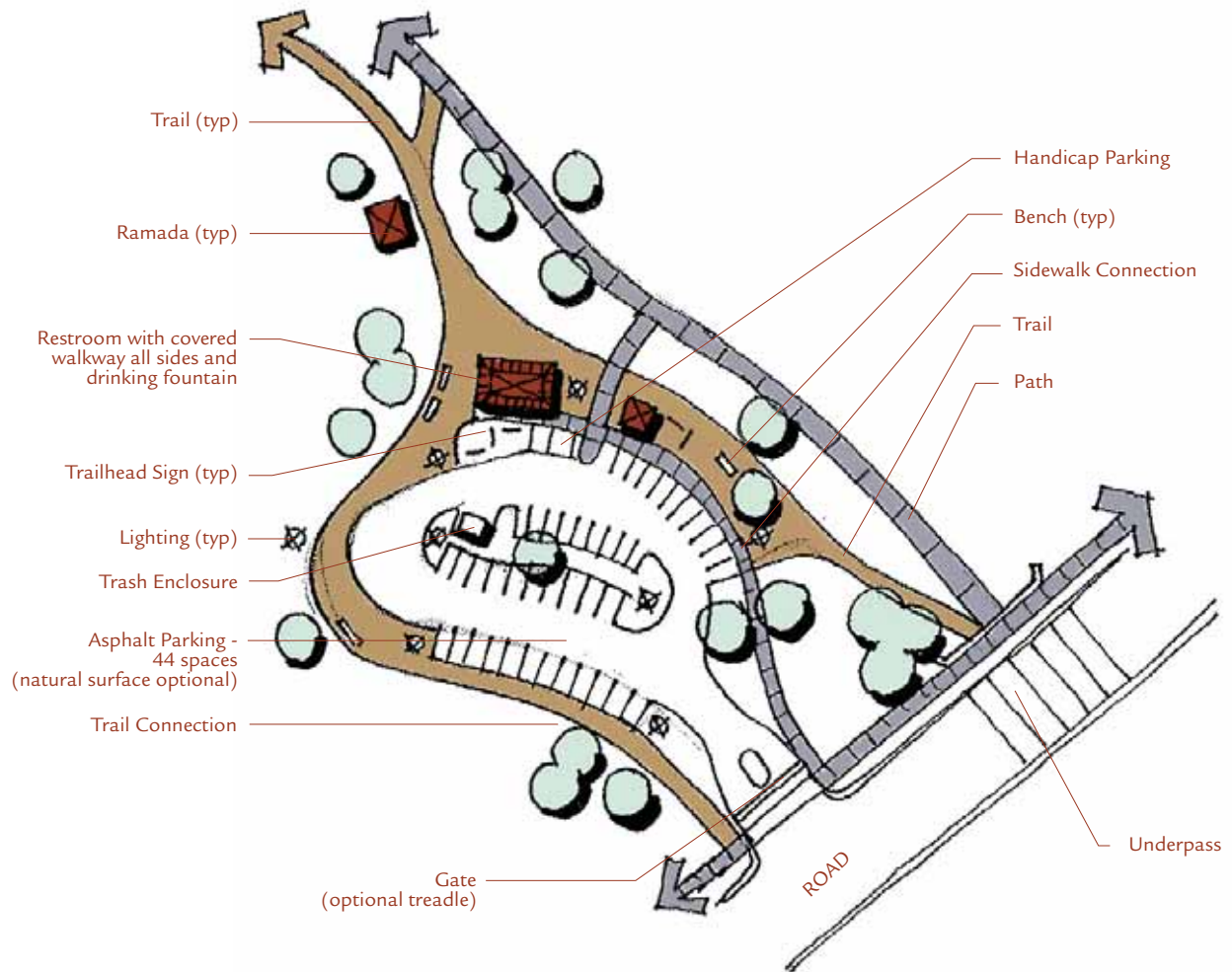
### CONCEPTUAL SMALL TRAILHEAD



# Trailheads, Entry Nodes, and Boundary Access Points

## Standard Trailhead

### CONCEPTUAL LARGE TRAILHEAD



# Trailheads, Entry Nodes, and Boundary Access Points

## Trailheads With Equestrian Facilities

There are two proposed sizes of Trailheads with Equestrian Facilities: large and small. These facilities provide features for equestrian uses as well as other trailhead parking and amenities. These facilities can be located along all classifications of unpaved trail corridors.

General Size	Parking Spaces <sup>1</sup>	Rest-rooms	Area and Amenity Lighting	General Amenities	Signs	Equestrian Amenities: EQ water source, tethering rails
<b>Small (THE[S])</b>	6-30 std. + 5-8 equestrian <sup>2</sup>	Yes	Yes	Benches, drinking water, landscape/ shade structure/picnic ramada, trash disposal, bike racks	Rules/notices, general and interpretive signs, location map	Yes, plus ADA mounting ramp or platform, manure disposal area, 1 round pen, 1 wash rack
<b>Large (THE[L])</b>	31-60 std. + 10-15 equestrian <sup>2</sup>	Yes	Yes	Benches, drinking water, landscape/ shade structure/picnic ramada, trash disposal, bike racks	Rules/notices, general and interpretive signs, location map	Yes, plus ADA mounting ramp or platform, manure disposal area, 1 round pen, 1 wash rack

1. Standard parking spaces are in addition to number of required parking spaces for combined park site.

2. Equestrian parking requirements: 25-foot min. width by 60- to 70-foot length.

Note: The facilities and improvements noted above are recommended and will typically be required for the trailhead types listed. Final determination of the scope of trailhead development will be determined by the applicable jurisdiction or agency parks and recreation department. Modifications to these standards may be proposed in response to:

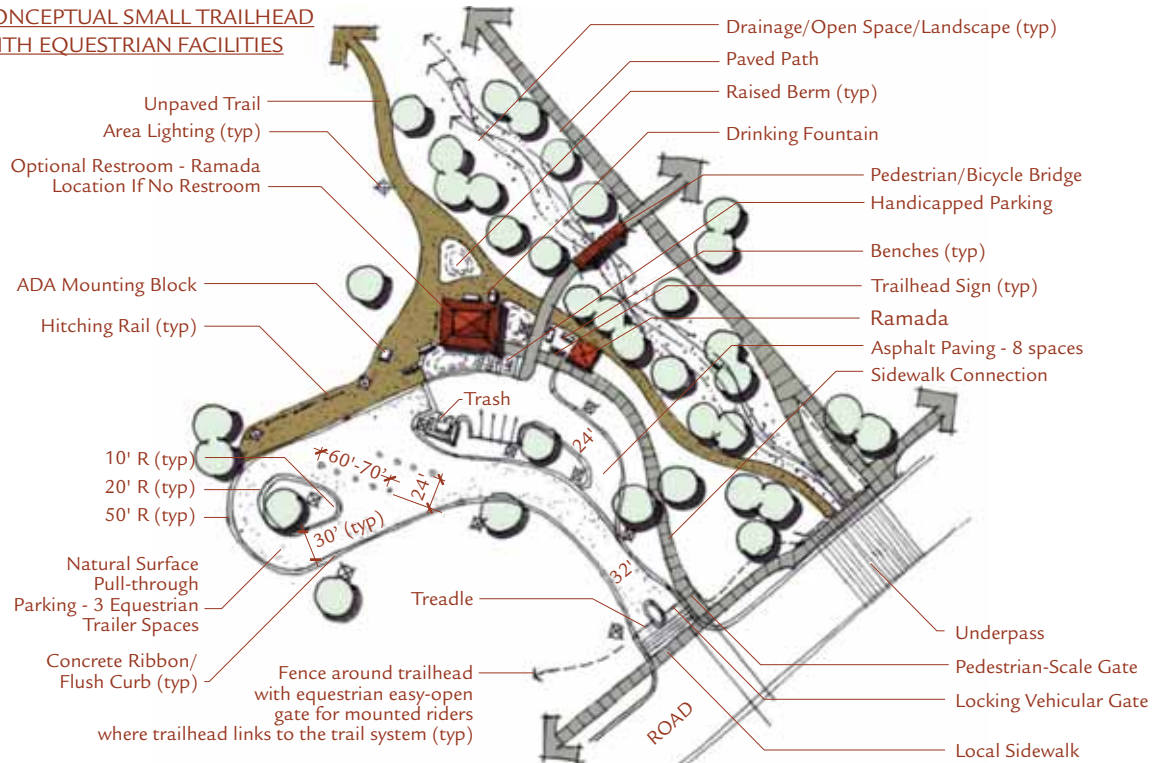
- Existing conditions associated with the approved site
- Anticipated demand for various types of public use
- The economic cost of utility service extensions
- Consistency with adopted resource management plans, park master plans, and/or other adopted planning documents



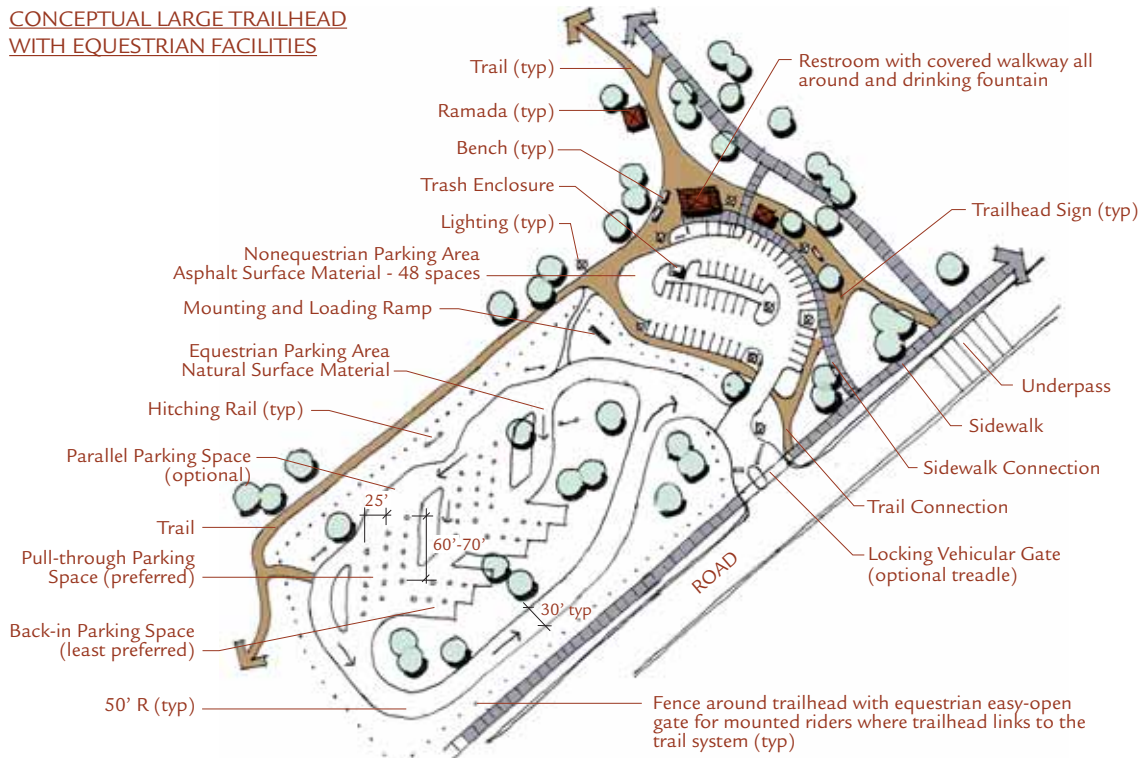
# Trailheads, Entry Nodes, and Boundary Access Points

## Trailheads With Equestrian Facilities

### CONCEPTUAL SMALL TRAILHEAD WITH EQUESTRIAN FACILITIES



### CONCEPTUAL LARGE TRAILHEAD WITH EQUESTRIAN FACILITIES





# Trailheads, Entry Nodes, and Boundary Access Points

## Neighborhood Equestrian Park and Trailhead

The combined Neighborhood Equestrian Park and Trailhead features a trailhead with additional equestrian amenities suitable for a park located in an equestrian neighborhood. Tucson's Ormsby Park's planned facility is an example of this type of park. Certain areas of Pima County currently have, or are likely to have, equestrian privileges where residents can keep horses on their property. This combined park and trailhead category provides trail access while also enhancing these areas by providing close-to-home facilities for riding and training horses, as well as serving as a location for small scale equestrian events and activities.

General Size	Acreage	Parking Spaces <sup>1</sup>	Rest-rooms	Area and Amenity Lighting	General Amenities	Signs	Equestrian Amenities
N/A	3 acres ±	9-15 total, 4-6 equestrian <sup>2</sup>	Yes	Yes, optional Arena lighting	Benches, drinking water, landscape/shade structure/picnic ramada, trash disposal, bike racks	Rules/notices, general and interpretive signs, location map	Equestrian water source and tethering rails, ADA mounting ramp or platform, manure disposal area, round pen, and one small dividable arena.

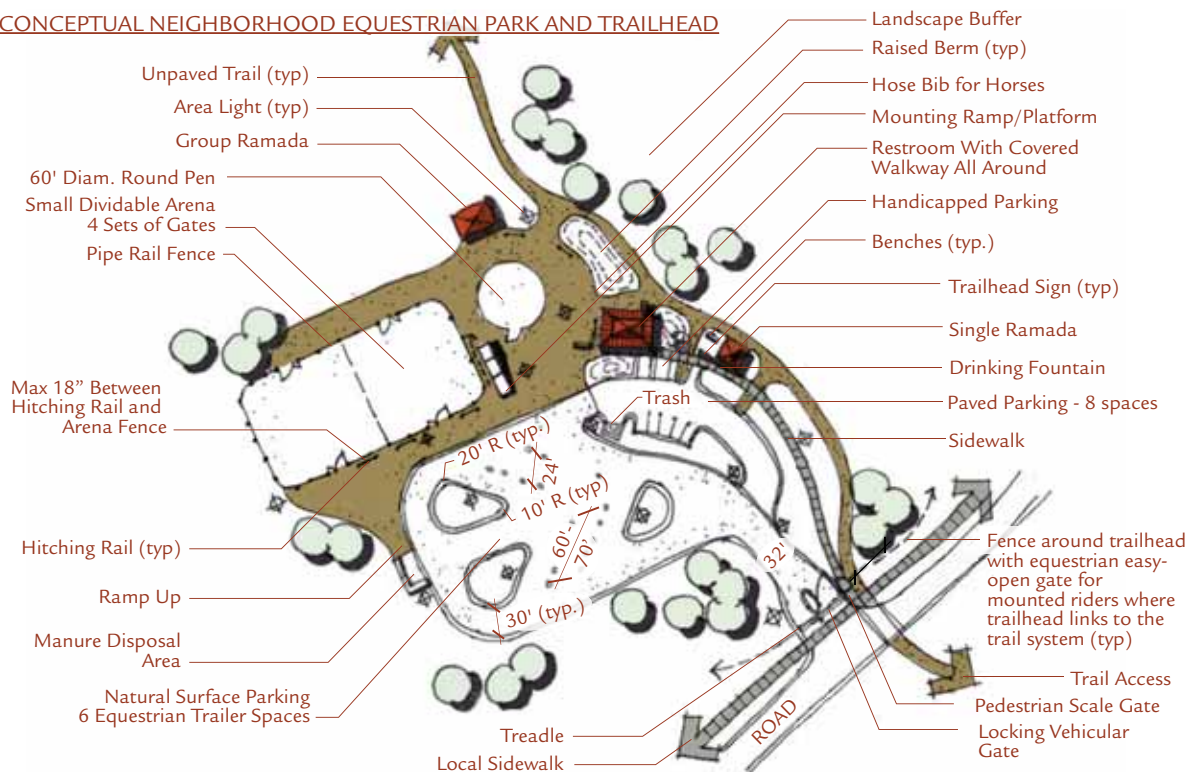
1. Standard parking spaces are in addition to number of required parking spaces for combined park site.

2. Equestrian parking requirements: 25-foot min. width by 60- to 70-foot length.

Note: No locations have been determined at the time of printing. The facilities and improvements noted above are recommended and will typically be required for the facility type listed. Final determination of the scope of development will be determined by the applicable jurisdiction or agency parks and recreation department. Modifications to these standards may be made based on the following:

- Existing conditions associated with the approved site
- Anticipated demand for various types of public use
- The economic cost of utility service extensions
- Consistency with adopted resource management plans, park master plans, and/or other adopted planning documents

### CONCEPTUAL NEIGHBORHOOD EQUESTRIAN PARK AND TRAILHEAD



# Trailheads, Entry Nodes, and Boundary Access Points

## Entry Nodes

Entry Nodes are developed access areas along all types of path and trail corridors that serve to encourage and welcome neighborhood and local pedestrian, equestrian, and bicycle access to the path/trail system. They provide minimal amenities, most importantly trail system signs. They should be located at approximately one-quarter-mile intervals along corridors, a distance typically cited as a reasonable walking distance to a destination. Entry nodes typically do not include parking facilities, but could have up to five standard size spaces depending on needs and circumstances. Because there would be numerous nodes using this spacing recommendation, they are not mapped. A concept sketch is provided in the Trailheads, Entry Nodes, and Boundary Access Points standards section.

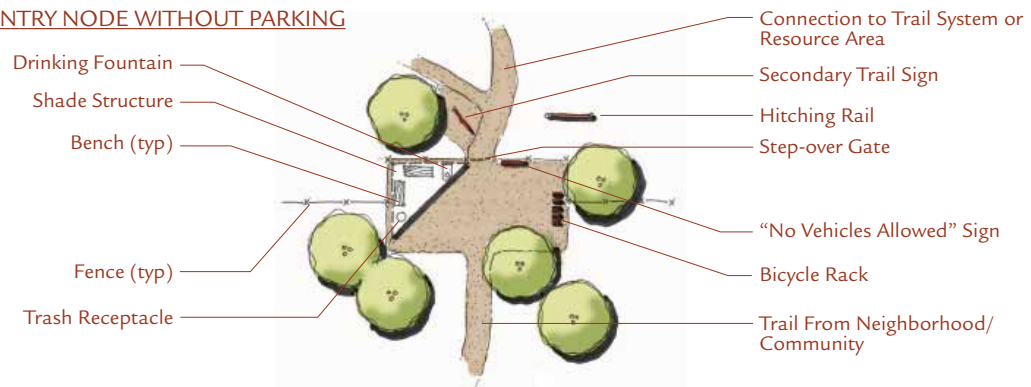
Spacing	Acreage	Parking Spaces	Rest-rooms	Area and Amenity Lighting	General Amenities	Signs	Equestrian Amenities
¼ mile intervals <sup>1</sup>	±.02 acres	0-5	None	Optional	Benches, drinking water, landscape/ shade structure, trash disposal, bike racks	Rules/notices, general and interpretive signs, location map	Equestrian water source and tethering rails when along an unpaved trail

1. River Park entry nodes as often as possible.

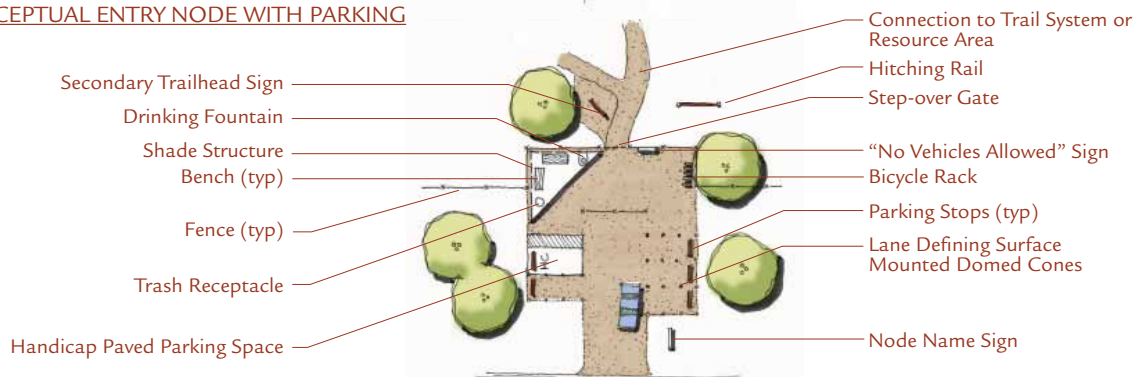
Note: The facilities and improvements noted above are recommended and will typically be required for the trailhead types listed. Final determination of the scope of trailhead development will be determined by the applicable jurisdiction or agency parks and recreation department. Modifications to these standards may be proposed in response to:

- Existing conditions associated with the approved site
- Anticipated demand for various types of public use
- The economic cost of utility service extensions
- Consistency with adopted resource management plans, park master plans, and/or other adopted planning documents

### CONCEPTUAL ENTRY NODE WITHOUT PARKING



### CONCEPTUAL ENTRY NODE WITH PARKING



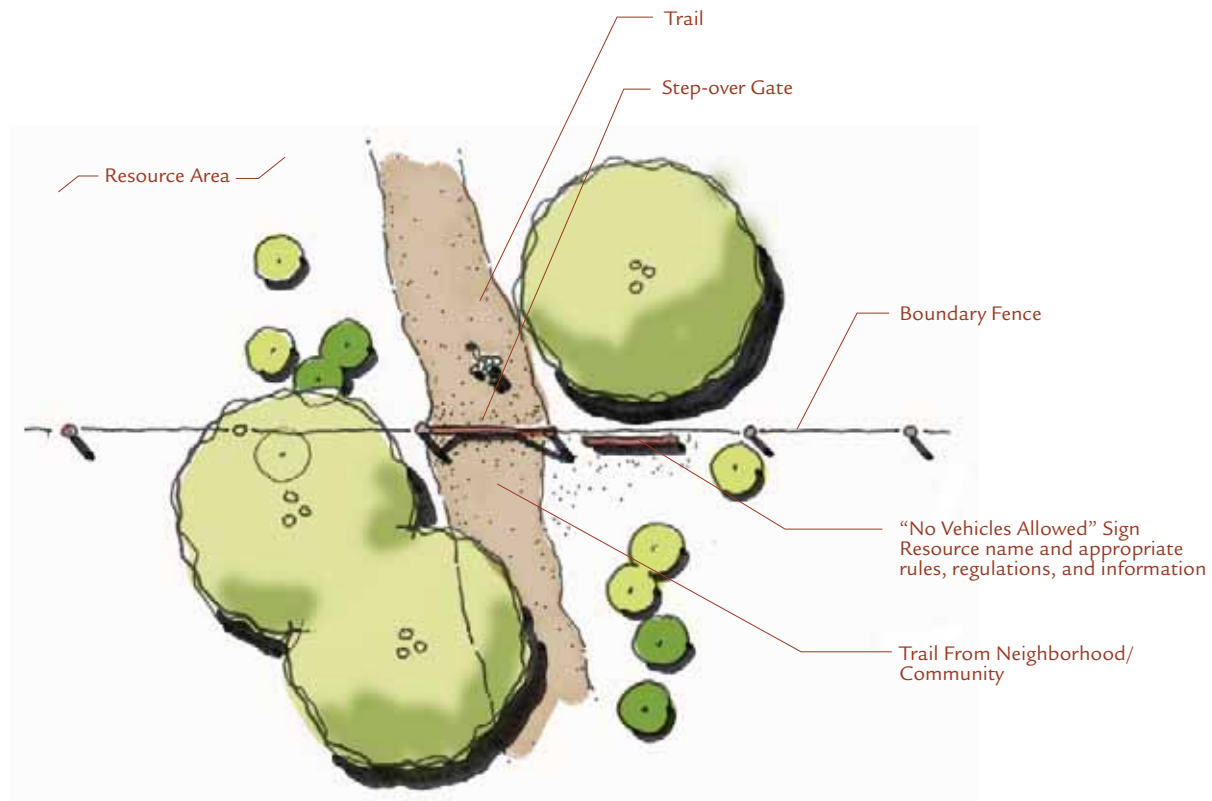


# Trailheads, Entry Nodes, and Boundary Access Points

## Boundary Access Points

Boundary Access Points are the smallest, most basic entry point to the natural resource areas surrounding Tucson. They are generally a four-foot wide gap in the boundary fence with a small trail sign. Parking is not provided. The small fence gap prohibits access by motorized vehicles.

Location	Size	Parking Spaces	Rest-rooms	Area and Amenity Lighting	General Amenities	Signs	Equestrian Amenities
Where path or trail enters large public lands	Four-foot fence opening with step over or other feature to discourage motorized use	None	None	None	None	Rules/notices, general and information (may include trail name and location map)	None



# Crossings

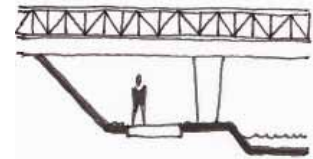
## Grade Separated

Grade-separated crossings typically occur when a road bridges over a path or trail following a river or other linear corridor. Where possible, paths and trails should be routed to this type of crossing, where a bridge or culvert already exists, or where one is feasible in the future, especially where a trail crosses a major arterial. There are several types of grade-separated crossings that are discussed in more detail in the standards section of this chapter: Bridge Underpasses, Pedestrian Underpasses, Shared Bicycle/Pedestrian Bridge Overpasses, and Land Bridges.

### BRIDGE UNDERPASS

When a trail and/or path passes under a bridge for a road or railroad track (such as along a river or creek), the following standards apply

<b>Vertical Clearance</b>	12-foot minimum
<b>Width</b>	15-foot minimum plus path or trail clearance standard
<b>Lighting</b>	Continuous, all day under bridge
<b>Signs</b>	Multi-use trail/path signs at both ends including Trail Etiquette
<b>Public Art</b>	Incorporate public art into design
<b>Location of Path/Trail Within Bridge Section</b>	Above the low-flow channel to minimize maintenance and maximize usability.



A BRIDGE UNDERPASS with a defined path/ trail corridor along one side of a wash/drainage corridor. Provide a separate path and trail wherever possible.

### PEDESTRIAN UNDERPASS

Where a trail/path passes under a road or railroad in a separate structure like a culvert or a tunnel, the following standards apply. This is a structure exclusive to path/trail and drainage use (except emergency and maintenance vehicles) and does not include a roadway.

<b>Vertical Clearance</b>	12-foot minimum
<b>Width</b>	15-foot minimum plus path or trail clearance standard
<b>Alignment</b>	As close as possible to perpendicular to the roadway to minimize length
<b>Visibility</b>	Continuous sight line distance from beginning to end
<b>Lighting</b>	Continuous, all day under bridge. Provide skylight/light tunnel at midpoint where medians above create opportunity
<b>Signs</b>	Multi-use trail/path signs at both ends including Trail Etiquette
<b>Public Art</b>	Incorporate public art into design
<b>Location of Path/Trail Within Bridge Section</b>	Above the low-flow channel to minimize maintenance and maximize usability

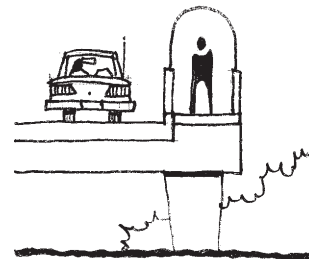


The safest and most usable PEDESTRIAN UNDERPASSES are lighted with clear sight lines. Users often share the space with drainage

### SHARED BRIDGE

Where a trail or path shares a bridge with vehicles, the bridge width should be increased on one side of the bridge to accommodate the trail or path. The following standards apply:

<b>Vertical Clearance</b>	12-foot minimum
<b>Width</b>	15 feet
<b>Visibility</b>	See-through, continuous sides and tops around trail/path for maximum safety
<b>Lighting</b>	Yes
<b>Signs</b>	Multi-use trail/path signs at both ends including Trail Etiquette
<b>Public Art</b>	Incorporate public art into design
<b>Location of Path/Trail Within Bridge Section</b>	Vertical separation between trail/path and traffic, such as a jersey barrier

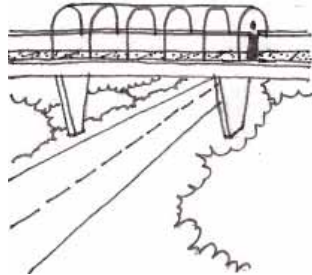



A SHARED BRIDGE accommodates vehicles as well as non-vehicular users within a protective enclosure separated from vehicular traffic



# Crossings

## Grade Separated

PEDESTRIAN BRIDGE/OVERPASS		
In cases where a special bridge that accommodates pedestrians, bicyclists or equestrians crosses over a road, creek or drainage, the following standards apply.		 <p>A PEDESTRIAN OVERPASS/BRIDGE passes above a road, railroad, canal or drainage corridor within a protective enclosure</p>
Vertical Clearance	12-foot minimum for pedestrians/bicyclists on bridge	
Width	15 feet	
Visibility	See-through, continuous sides and tops around trail/path for maximum safety	
Lighting	Yes	
Public Art	Incorporate public art into design	
Safety	Incorporate devices as needed to prevent items being thrown from bridge into traffic below	
Signs	Multi-use trail/path signs at both ends including Trail Etiquette	
LAND BRIDGE		
Land bridges have been used where wildlife corridors are of value and/or where a trail user experience is so important as to literally obscure any sense of a crossed roadway. They can become very significant entry or iconic features in and of themselves. The following standards apply but are greatly supplemented with and abundance of planting and an artistic flair.		 <p>Source: Landscape Architecture Magazine, 2009. Bridge by Jones and Jones</p>
Vertical Clearance	12-foot minimum for pedestrians/bicyclists on bridge	
Width	15-foot minimum path or trail corridor 12-foot minimum each side of path/trail corridor	
Visibility	Open sight lines along path/trail corridor. Highway below screened completely from path/trail.	
Lighting	Yes	
Public Art	Incorporate public art into design	
Safety	Incorporate devices as needed to prevent items being thrown from bridge into traffic below	
Signs	Multi-use trail/path signs at both ends including Trail Etiquette. Interpretive signs are appropriate based upon setting.	

# Crossings

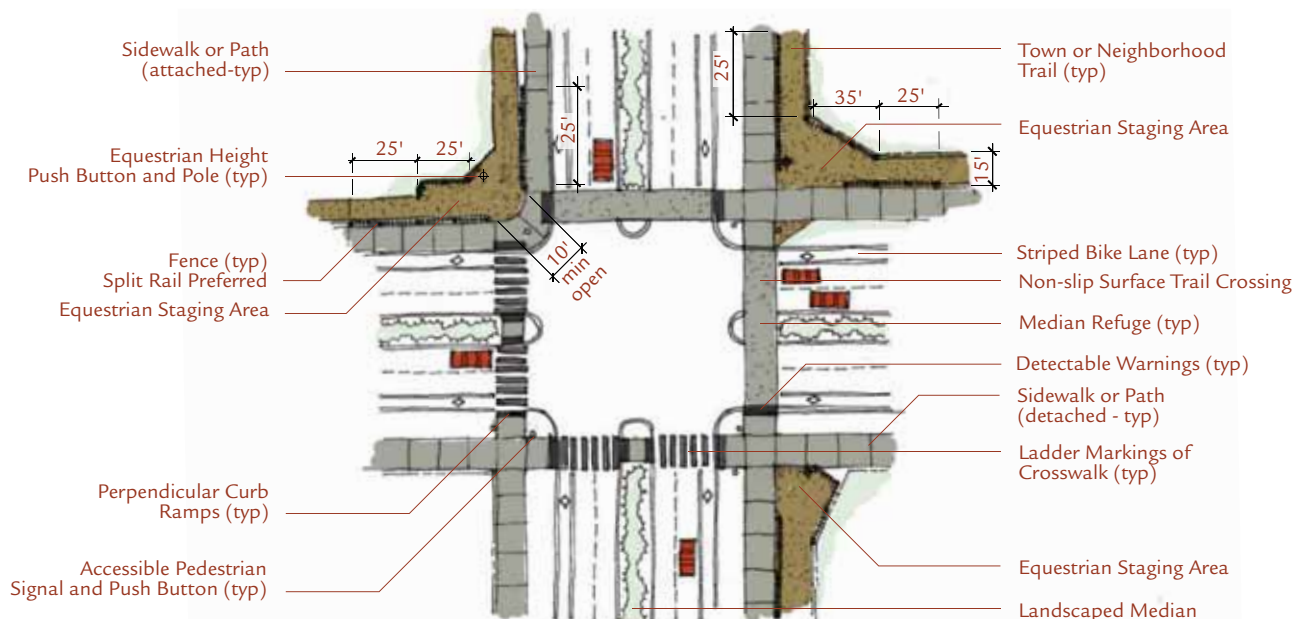
## At-Grade

The following at-grade path and trail crossing treatments are guidelines only and identify desirable elements that can be incorporated into crossings to make them more accommodating to path and trail users. These guidelines must be considered in combination with all other roadway and intersection design parameters and constraints.

### ENHANCED SIGNALIZED CROSSING

Where trails and paths encounter signalized intersections, the following guidelines apply. The design may include corner improvements on two, three or four corners and one, two, three or four cross-walk improvements, depending on the trails and paths coming together at the corner.

<b>Features</b>	<ul style="list-style-type: none"> <li>• Provide ladder markings of crosswalks and curb ramps at right angles to moving traffic</li> <li>• Where feasible, curb extensions with landscaping and detectable warning</li> <li>• Provide accessible pedestrian signals</li> <li>• Provide adequate sight line distances that consider adequate time, visibility, warning signs, and lighting</li> <li>• Do not impede sight lines at roadway crossings with signs, bus stops, benches, parked vehicles, light posts, vegetation, or other objects that could reduce user visibility</li> <li>• Where feasible, provide a roadway refuge or median area that permits a "safe zone" when traffic is moving on a multi-lane or divided roadway</li> <li>• Where feasible, provide traffic calming designs, such as flashing lights alerting drivers to a path/trail crossing area ahead in the roadway, decreased speed limits, roundabouts, narrowed travel lanes, speed tables or plateaus, and stop bars</li> <li>• Provide for pedestrian/equestrian scale lighting</li> <li>• Whenever possible, provide curb cuts for people with disabilities, which are also equestrian-friendly. Design them to be the same width as the trail/path tread or greater.</li> </ul>
<b>Where Equestrians Are Present</b>	<ul style="list-style-type: none"> <li>• Provide a "gathering space" or a holding zone/area that will permit a group of equestrians to stand and wait for the appropriate and safe time to complete a roadway crossing. The trail surface width should fan out to incorporate a minimum 25-foot wide area parallel to the edge of the roadway that is also a minimum of 15 feet in depth from the edge of the roadway</li> <li>• Equestrian push button-activated crosswalk signal mounted within the gathering space at a height of 6' at any corner crossed by the trail</li> <li>• The tread for an at-grade, hard-surface roadway crossing should have enough texture to prevent an equine's hooves from slipping on the surface. Heavy traffic requires a very durable tread surface such as washed concrete with 3/8 – 1/2-inch exposed broken aggregate. Very light traffic roadways can generally utilize grooved or very coarse broom-finished concrete surfaces, bricks, pavers, or chip seal asphalt. Concrete grooves should be incised perpendicular to the direction of travel for trail users on the roadway crossing. Depth of the grooves should be 1/4 to 1/2 inch deep, at 1 to 2-inch intervals. NOTE: Typical asphalt and concrete road or sidewalk surfaces DO NOT provide enough texture or traction and can be very slippery to an equine.</li> <li>• Fencing or barriers to separate trail from path, adjoining property, etc.</li> </ul>



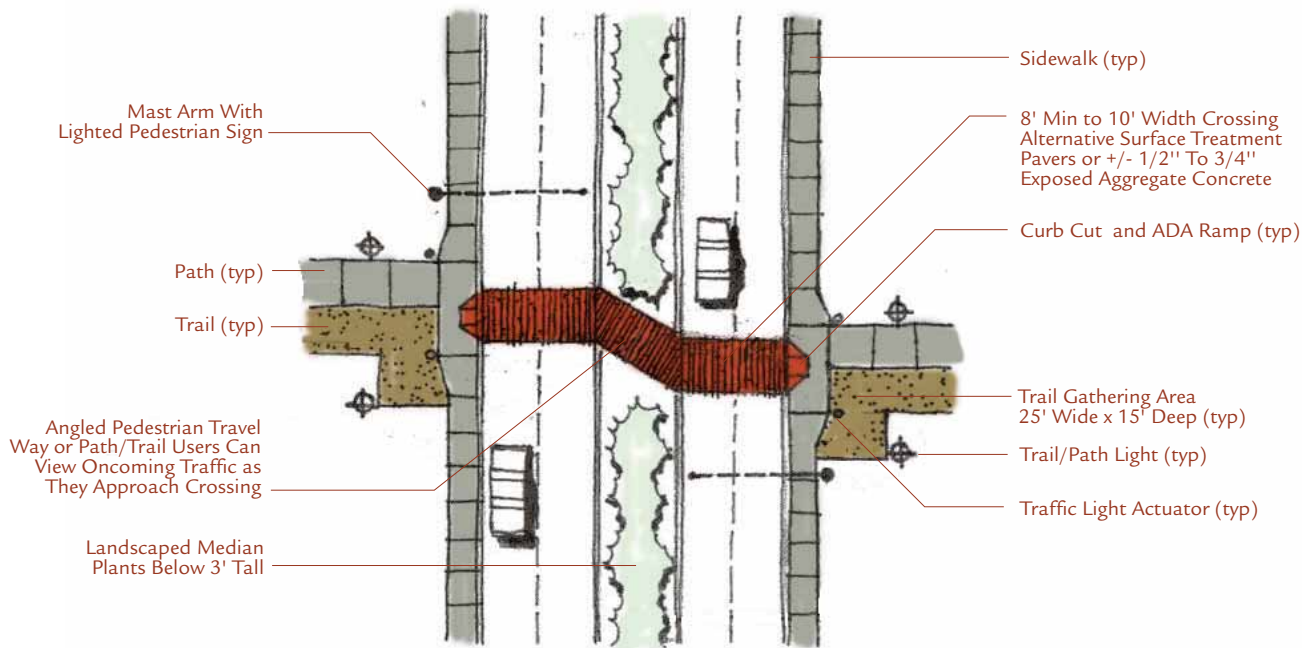
# Crossings

## At-Grade

### MID-BLOCK CROSSING

At the few locations where a trail or path follows a utility corridor and intersects a street where no other street or potentially signalized intersection exists, the crossing can be enhanced to better warn roadway and path/trail users of this crossing. Many of the same features of the enhanced at-grade crossing apply to mid-block crossings as well. These features would include one or more of the elements shown below.

<b>Features</b>	<ul style="list-style-type: none"> <li>• Ladder or continental style marked crosswalks</li> <li>• Adequate sight line distance considering time, visibility, amenities, warning, signs, and lighting</li> <li>• Gather spaces at each crossing side</li> <li>• Push button activated crosswalk signals at 6-foot height for equestrians and at pedestrian heights at sides of road and within the median</li> <li>• Detectable warning at street/path/trail edge</li> <li>• Crossing island or median (raised or flush) safe zone with curb ramps (if raised) and staggered or "Danish Offset" the same width or greater than path/trail</li> <li>• Where feasible, provide traffic calming designs such as decreased speed limits, narrowed travel lanes, speed tables or plateaus, and stop bars</li> <li>• Pedestrian warning signs (refer to MUTCD) for sign placement criteria. Consider yield signs, flashing yield signs, or traffic signals</li> <li>• Advance yield lines</li> <li>• Appropriate pedestrian- scale lighting</li> <li>• Refer to the AASHTO <i>Guide for the Planning, Design and Operations of Pedestrian Facilities</i>, July 2004., Section 3.4 "Midblock Crossings" and the AASHTO <i>Guide for the Development of Bicycle Facilities</i>, 1999, pages 46-53 for additional information.</li> </ul>
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The feasibility of providing any mid-block crossing decreases as a roadway is widened, and speeds and traffic increase. As this situation develops over time, it is possible that trails along mid-block corridors would be routed to nearby signalized or grade-separated crossings and mid-block crossings will be discouraged through signs, fencing, and/or barriers.



# Crossings

## At-Grade

Nationwide, transportation planners and officials are exploring mid-block crossing options. Tucson has three types that are gaining popularity ([www.tucsonaz.gov](http://www.tucsonaz.gov)).

### *PELICAN Traffic Signal*

*The PEdestrian LIght Control Activation (PELICAN) system provides a safe, two-stage crossing for pedestrians. The crossing incorporates the median island refuge between the two stages. These crossings can be easily identified by artwork displayed on the median. The PELICAN is placed mid-block on major streets, and minimizes the potential for stops, delays, and accidents. A pedestrian uses the crossing by pressing a button to activate the first signal. When the light turns red, a "WALK" signal prompts them to proceed to the median. The pedestrian then walks a short distance along the median to activate the second signal. A second "WALK" indication appears when the traffic signal turns red. The PELICAN uses a standard Red-Yellow-Green signal for motorists and remains green unless activated by a pedestrian. Bicyclists should yield to pedestrians, dismounting if necessary.*



### *TOUCAN Traffic Signal*

*The TwO GroUps CAN cross (TOUCAN) system was designed to provide a safe crossing for two groups - pedestrians and bicyclists. TOUCAN systems are placed at locations of heavy bicycle and pedestrian crossing activity and along roadways that are prioritized for non-motorized uses, sometimes known as "Bike Boulevards." An added benefit to the TOUCAN signal system is that motorized traffic is not allowed to proceed through these signals, decreasing the number of cars on neighborhood streets, and enhancing the neighborhood's quality of life. A TOUCAN can be activated only by bicyclists or by pedestrians. Both use a push button to activate the signal. Bicyclists respond to an innovative bicycle signal and use a special lane when crossing. Pedestrians get a standard WALK indication and have a separate, adjacent crosswalk. The system uses a standard signal for motorists.*



### *HAWK Pedestrian Flasher*

*The High Intensity Activated Cross Walk (HAWK) is one of the newest crossing systems in use. It is based on a European design and resembles the American school bus "children present" warning. The HAWK consists of a Red-Yellow-Red signal format for motorists. The signals remain off until a pedestrian activates the system by pressing a button. First, a FLASHING YELLOW light warns motorists that a pedestrian is present. The signal then changes to SOLID YELLOW, alerting drivers to prepare to stop. The signal then turns SOLID RED and shows the pedestrian a "WALK" symbol. The signal then begins ALTERNATING FLASHING RED and the pedestrian is shown a flashing "DON'T WALK" with a countdown timer. Drivers are allowed to proceed during the flashing red after coming to a full stop and making sure there is no danger to pedestrians. In school zones, drivers must wait until the children and crossing guard are completely out of the crossing before proceeding. Bicyclists are advised to yield to pedestrians and dismount if necessary.*





# Crossings

## At-Grade

WASH LOW FLOW OR DIP CROSSING	
These crossings can be used AT drainage areas where a bridge structure is financially unfeasible or where flows are small or infrequent. They can be installed as an initial phase and eventually replaced by a separate pedestrian/ bridge overpass or a shared bridge, thereby ensuring year round use.	
<b>Vertical Clearance</b>	12-foot minimum
<b>Width</b>	Same as the trail or path
<b>Surface</b>	<p>Unpaved trail crossing: washed concrete with 3/8" - 1/2" exposed broken aggregate or incise grooves in concrete perpendicular to direction of trail traveler, 1/4-1/2" deep at 1-2" intervals; Thickened concrete edges</p> <p>Path crossings: heavy broom finish in concrete perpendicular to direction of path traveler; thickened concrete edges</p> <p>Line the ramps upper and lower edges with 5-inch to 6-inch high rock</p>
<b>Lighting</b>	Optional (at jurisdictions discretion for safety)
<b>Signs</b>	Multi-use trail/path signs at both ends including Trail Etiquette



A WASH LOW-FLOW or DIP CROSSING provides a stable and firm footing for all users



# Signs

## DESIGN CONSIDERATIONS

- Use distinct or identifying shape
- Use of jurisdictional logo and/or new logo for Pima Regional Trail System
- Use universal/international pictorials recreational symbols.
- Design for flexibility and modularity
- Design for shade and/or protection from the elements at appropriate locations
- Incorporate color coding for various types of information
- Use durable, low maintenance materials
- Design for simple and straight forward sign ordering and installation procedures (professional, staff, volunteers)
- Incorporate simple fabrication procedures
- Incorporate readily available materials to lessen costs
- Use non-fade colors
- Strive for vandal resistance in materials and fabrication techniques.
- Conduct a detailed sign inventory by path or trail corridor and recommend specific locations for all sign types.

A sign template that incorporates the name of the trail or facility, the name 'Pima Regional Trail System', and the name of the jurisdiction in which the particular segment is located should be developed and agreed upon by all the participating jurisdictions. The sign could also include room for logos and/or names associated with sub-trail systems.

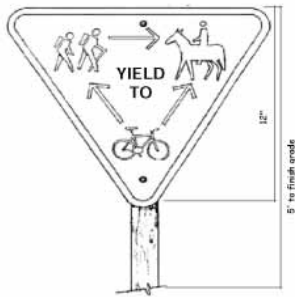


# Signs

Sign Type	Sign Reference	Sign Description/Information	Recommended Locations
Large entry monument	A-1	Facility name, address, jurisdictional logo, Pima Regional Trail System logo	At drive-in location to largest trailheads with large amount of parking and access to main trails and paths
Medium entry monument	A-2	Facility name, address, jurisdictional logo, Pima Regional Trail System logo	At drive-in location to smaller trailheads with at least 10 parking spaces and access to major path or trail corridor
Primary Trailhead	TH-1	<p>Front Side: Jurisdictional logo and/or Pima Regional Trail System logo, trail/path name, regulation description and universal symbols if any, approved trail use, Universal Trail Access Info (surface, length, typical slopes, etc.) trail etiquette triangle if more than one use, directional arrows, map of Pima Regional Trail System logo path/trail system network with "you are here."</p> <p>Backside: Jurisdictional logo and/or Pima Regional Trail System logo, trail/path name, bulletin board with space for brochures, fliers, pamphlets, small maps, temporary warnings, etc. Room for additional information, directional arrow panels.</p>	At trail/path access point from a trailhead or from other public areas like parks.
Secondary Trailhead	TH-2	<p>Front Side: Jurisdictional logo and/or Pima Regional Trail System logo, trail/path name, regulation description and universal symbols if any, Universal Trail Access Info (surface, length, typical slopes, etc.) approved trail use, Universal Trail Access Info (surface, length, typical slopes, etc.) trail etiquette triangle if more than one use, directional arrows.</p> <p>Back Side: Map of Pima Regional Trail System network with "you are here."</p>	At trail/path access point within an Entry Node.
Special Regulatory/Boundary Warning	R-1	Jurisdictional logo, distinct shape, special issue regulation, i.e. "No fires", "No motorized vehicles", "No vehicles beyond this point", "Private property beyond this point", "Please respect the private property of our neighbors", etc.	As needed where problems already exist or preventive where problem is possible or likely
Interpretive Orientation	I-1	Jurisdictional logo and/or Pima Regional Trail System logo, orienting information for entire area or beginning of an interpretive trail in written and/or graphic format	At beginning of interpretive trail corridor
Interpretive	I-2	Jurisdictional logo and/or Pima Regional Trail System logo, interpretive information in written and/or graphic format	At identified features
Single Path/Trail Directional	T-1	Jurisdictional logo and/or Pima Regional Trail System logo, trail name with directional arrow, universal graphic symbols, distance to main features along trail, trailheads, and intersections with other trails.	Approximately ¼ mile from trailhead and approximately every ¼ mile along corridor



# Signs

Sign Type	Sign Reference	Sign Description/Information	Recommended Locations
Multi-Path/Trail/ Feature Directional	T-2	Multiple trail name panels with directional arrows on perpendicular or parallel panels, universal graphic symbols, distance to main features, trailheads, and intersections with other trails.	At intersection of paths/trails or routes to features
Trail Etiquette	T-3	Trail user yield triangle if more than one use allowed 	At intersections of paths/trails



# Pedestrian Districts

## DESIGN CONSIDERATIONS

- 20-foot wide walkway, visually and functionally separate from the path of vehicles.
- A walkway surface that is smooth, slip-resistant, and without cracks, indents, or steep grade.
- Walkway design that adds character to the architectural theme.
- Clear of protruding objects.
- The walkway is in an environment with a pedestrian scale and pleasing building height ratio.
- There are no driveway crossings.
- All changes in elevation have ramps and intersections corners have curb cuts for both directions or one broad cut servicing both crosswalks..
- The walkway is physically separated from vehicular traffic by at least four vertical or horizontal elements.
- At least one foot-candle of lighting that is generally continuous.
- Pedestrian crossings with vehicular traffic have a defined crosswalk.
- Traffic signals are timed for a walking speed of two and eight-tenths feet per second, and there are walk/don't walk signs, auditory signals or other such elements.
- Minimum 75 percent shade coverage along the route and at gathering nodes.
- Two to three seating opportunities per block.
- Site furnishing that could include trash receptacles, telephone, drinking fountains, restrooms or pet waste container dispensers.
- Wayfinding and directional signs.
- Facilities include public art.
- Pocket parks and other planting opportunities.
- Transit stations with plenty of amenities.
- Conduct a detailed sign inventory by path or trail corridor and recommend specific locations for all sign types.



## Pedestrian Activity Areas

### DESIGN CONSIDERATIONS

- A 8- to 12-foot wide walkway, visually and functionally separate from the path of vehicles.
- A walkway surface that is smooth, slip-resistant, and without cracks, indents, or steep grade.
- Clear of protruding objects.
- Walkways are flat and straight and set back from curb so they don't meander around driveway crossings
- Driveway crossings are few.
- All changes in elevation have ramps and intersections corners have curb cuts for both directions or one broad cut servicing both crosswalks.
- The walkway is physically separated from vehicular traffic by at least two vertical or horizontal elements.
- At least one foot-candle of lighting at intersections and crosswalks and lights are spaced so there is spot to spot lighting.
- Pedestrian crossings with vehicular traffic have a defined crosswalk and may also include activated signal, median refuge or other such elements.
- Traffic calming improvements are introduced to slow vehicular speeds in appropriate areas off arterial streets.
- Traffic signals are timed for a walking speed of two and eight-tenths feet per second, and there are walk/don't walk signs, auditory signals or other such elements.
- Minimum 60 percent shade coverage along the pedestrian route and at gathering nodes.





## E. Facilities

The following list are facilities that comprise the trails system. Some are existing, some need improvement or expansion, and some need to be built. All the facilities are integral to the system so are not prioritized in any manner. As development occurs and/or funding becomes available, the opportunity shall be taken to implement these projects. This list does not preclude other facilities from being proposed if they add to the connectivity or enhancement of the overall system.

### *Trails*

#### **Airport Wash North Fork Trail (T001)**

The five-mile Airport Wash North Fork Trail trends from the northwest to the southeast, from the Hughes/Alvernon Path that edges the airport to the proposed Sarnoff Drive alignment Greenway. It crosses the Swan Road, Kolb Road south, and Wilmot Road greenways. The middle section of the trail is a proposed greenway, Airport Wash North Greenway, which is one mile from Craycroft Road to Wilmot Road.

#### **Arroyo Chico Wash Trail (T002)**

The Arroyo Chico Wash Trail branches off from the Arroyo Chico Wash Greenway, where it turns south near Tucson Boulevard. The one-mile trail connects the Greenway to the David Bell Path on Randolph Way.

#### **Atturbury Connector Trail (T003)**

The Atturbury Connector Trail is a one-mile north south trail that connects the two branches of the Atturbury Wash. It's midway between the east edge of Davis-Monthan AFB and Houghton Road Greenway.

#### **Butterfield Stage Route Trail (T004)**

The Butterfield Stage Route Trail includes 10.7 miles within Pima County. The trail begins at approximately Lambert Lane where it branches away from the Santa Cruz River Park and parallels Interstate 10 until the county boundary. The trail continues further north into Pinal County.

#### **Central Arizona Project Canal Trail (T005)**

The Central Arizona Project Canal Trail is a trail of National Significance, as discussed in the System Features chapter. In Pima County, the CAP Canal Trail is almost 43 miles long, generally trending north to south from the county border to Los Reales Road.



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### **Cholla Wash Trail (T006)**

The proposed two-mile Cholla Wash Trail connects Mission Road Path west to San Juan Road. It intersects San Juan Park and Greasewood Path and Greenway.

### **Civano Wash Trail (T007)**

Civano Wash Trail, one and six-tenths miles, is at the upper end of Civano Wash. It starts at the intersection of Houghton and Irvington roads and trends southeast one mile to the Civano Wash North Greenway. From the south end of Civano Wash North Greenway, approximately Bilby Road, the trail picks up again and continues to Poorman Road.

### **Columbus Boulevard Secondary Trail (T008)**

This seven-tenths mile trail diverges from the Columbus Boulevard Enhanced Corridor just south of Lazy Creek Drive on the west side of Columbus Boulevard. It continues west and then north and connects to the Rillito River Park.

### **Connection to Habitat for Humanity Trails Park Trail (T009)**

This two and two-tenths mile trail connects the Santa Cruz River Diversion Channel on the east to the Jacobs Trust property on the west. It provides access to the Habitat for Humanity Trails Park and intersects the Mission Road Path and Greasewood Road Greenway.

### **Coronado Ridge Wash Trail (T010)**

The Coronado Ridge Wash Trail branches off from the Estes Wash Greenway and continues south and east to Melpomene Way Backcountry Trail. It intersects Houghton Road Greenway.

### **Douglas Park/Thomas Park Connection Trail (T011)**

This one and six-tenths mile trail connects Quincie Douglas Park and James Thomas Park. It intersects the Kino Parkway Path, The Habitat Trails Park, and ends at the El Paso and Southwest Gas Greenway.

### **Drexel Road Trail (T012)**

The Drexel Road Trail parallels Drexel Road for a distance of almost two miles, from the Fantasy Island/Irvington Trail east to the Power Line Path. It intersects Houghton Road Greenway, Mesquite Ranch Wash Trail, and Civano Wash North Greenway.

### **Enchanted Hills Wash Trail (T013)**

Enchanted Hills Wash Trail is a two and eight-tenths mile trail that follows the wash from Mission Road to the 36th Street Backcountry



Trail. It intersects Greasewood Road Greenway and provides access to the 36th Street Trails Park.

## **Estes Wash Trail (T014)**

The one and three-tenths mile Estes Wash Trail is a continuation of the Estes Wash Greenway. It trends southeast from Houghton Road Greenway to the Melpomene Way Backcountry Trail.

## **Fantasy Island/Irvington Trail (T015)**

The Fantasy Island/Irvington Trail is a one and four-tenths mile north south trail that connects Irvington Road Greenway to Atturbury Wash North Fork Greenway, passing through the Fantasy Island Trails Park and intersecting Drexel Road Trail.

## **Gas Line Trail (T016)**

The Gas Line Trail follows the gas line easement that parallels Interstate 10 on the north side of the freeway. The trail extends for 27 miles from Wilmot Road to the Cochise County boundary.

## **Hidden Hills Wash Trail (T017)**

Hidden Hills Wash Trail is an extension of Hidden Hills Wash Greenway. It's a one-mile trail connecting Houghton Road Greenway, just north of 29th Street, to Old Spanish Trail Path, midway between Avenida Los Reyes and Melpomene Way.

## **Houghton Road Trail (T018)**

Houghton Road Trail is an extension of the Houghton Road Greenway. It extends five miles from Tanque Verde River Park to the Coronado National Forest boundary.

## **La Cañada Drive Trail (T019)**

The La Cañada Drive Trail connects the Cañada del Oro River Park on the north to the Rillito River Park on the south, a distance of approximately six and one-quarter miles. It intersects several backcountry trails and the Cortaro Farms Road Path.

## **Mesquite Ranch Wash Trail (T020)**

Mesquite Ranch Wash Trail is a one and one-half mile trail that begins at Houghton Road Greenway, just south of Seven Generation Way and trends southeast to Poorman Road, crossing Drexel Road Trail.

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### **Palo Verde Road Trail (T021)**

The three and nine-tenths mile Palo Verde Road Trail connects Palo Verde Greenway on the north to Rodeo Wash Greenway on the south. It intersects with the Julian Wash Greenway midway.

### **Pantano Wash Trail (T022)**

The 21-mile proposed Pantano Wash Trail begins at Houghton Road where the Pantano River Park terminates. It trends southeast along Pantano Wash to just west of the Marsh Station Road-Interstate 10 interchange. It intersects Civano Wash North Fork Greenway, Power Line Path, Rincon Creek Greenway, Valencia Greenway, Civano Wash Path, Atturbury Wash Path, Wentworth Road Path, and ends at Gas Line Trail.

### **Power Line Trail (T023)**

The Power Line Trail is 12.3 miles and connects the UPRR Greenway on the west to Houghton Road Greenway on the east. It intersects Hughes/Alvernon Path, and the Swan Road, Wilmot Road, Sarnoff Drive, Kolb South, and Old Vail Road/Harrison Road greenways.

### **Railroad Wash Trail (T024)**

Railroad Wash Trail is a proposed two and six-tenths mile trail that connects Arroyo Chico Greenway on the north to El Paso and Southwest Gas Greenway on the south. It intersects the Barraza/Aviation Parkway and passes the Boys and Girls Club and James Thomas Park.

### **Reyes Wash Trail (T025)**

Two-mile Reyes Wash Trail connects Tanque Verde River Park and Melpomene Way Backcountry Trail.

### **Rita/Julian Greenways Connector Trail (T026)**

This two-mile trail follows a wash from east to west from the Rita Greenway to the Julian Wash Greenway. It provides access to the Rita Ranch Flood Control Basin Trails Park and intersects the Rita Ranch Trail.

### **Rita Ranch Trail (T027)**

The two and eight-tenths mile Rita Ranch Trail follows along the southwestern side of the Rita Ranch subdivision. It provides a connection between the Rita/Julian Wash Greenways Connector Trail and the Houghton Road Greenway. It also intersects the Rita Ranch Greenway.



## Rita Ranch Two Trail (T028)

Rita Ranch Two Trail is a short, seven-tenths mile, trail that branches off from Rita Ranch Trail, west of Houghton Road, and takes a more northerly route through the Rita Ranch subdivision to connect to Houghton Road.

## Santa Cruz River Diversion Channel Trail (T029)

The three and eight-tenths mile Santa Cruz River Diversion Channel Trail diverges from the main Santa Cruz River alignment and Santa Cruz River Park, just north of Irvington Road. It follows the diversion channel to the boundary of the San Xavier Indian Community. It can also be accessed from the West Branch Santa Cruz River Diversion Channel Greenway Trailhead.

## Wentworth Road Trail (T030)

The proposed Wentworth Road Trail follows Wentworth and Colossal Cave roads and connects Pantano Wash Trail to the Power Line Greenway. It intersects the Esmond Station Greenway and Gas Line Trail, which parallels Interstate 10 on the north side. The trail parallels a path on the north side of the road.

## *Paths*

### 1st Avenue Path (P001)

The proposed one and one-third mile 1st Avenue Path connects the Tangerine Road Greenway on the north to the Lambert Lane Path on the south.

### 15th Avenue/Freeway Path (P002)

The proposed 15th Avenue/Freeway Path connects the Elm Street Enhanced Corridor to the El Paso and Southwest Gas Greenway at Congress Street, a distance of approximately one and six-tenths miles. It passes Francisco Elias Esquer, Estevan, and Oury parks, and intersects the proposed University Boulevard Bicycle Boulevard and the Arroyo Chico West Greenway.

### Airport Wash Path (P003)

The Airport Wash Path begins at Nogales Highway, where the Airport Greenway ends, and continues south and east to Alvernon Way. The path follows the wash from Nogales Highway to Valencia Road, east on Valencia Road to Country Club Drive, south to Los Reales Road, and east to Alvernon Way and the Hughes/Alvernon Path, a distance of approximately four and two-tenths miles.



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#### **Atturbury Wash Path (P004)**

The proposed Atturbury Wash Path begins at the south end of the Atturbury Wash North Fork Greenway and extends east to Pantano Wash Trail, a distance of eight-tenths mile.

#### **Barnett Road Path (P005)**

Barnett Road Path is a two and two-tenths mile path that connects the Butterfield Stage Route Trail to the Sanders Road Path. It also intersects Unnamed 21 Path and Tangerine Road Path.

#### **Barraza/Aviation Path (P006)**

The Barraza/Aviation Path, which stretches from the City of Tucson's new Basket Bridge to the Alvernon Way alignment, is located along the north side of Aviation Parkway and is approximately three and eight-tenths miles long. The path links Golf Links Bicycle and Pedestrian Path at its east end, the Basket Bridge at its north end, and Eastmoor and Country Club city parks midway. The Barraza/Aviation Path would benefit from the installation of additional landscaping, particularly trees, and an eventual widening of the path from the current ten-foot width to 12 feet as user loads increase.

#### **Calle Buena Vista Path (P007)**

The proposed half-mile Calle Buena Vista Path connects Calle Concordia Backcountry Trail on the north to Hardy Road on the south. It intersects Carmack Wash Backcountry Trail.

#### **Civano Wash Path (P008)**

The proposed three and seven-tenths mile Civano Wash Path diverges from the Atturbury Wash North Fork Greenway, south of Valencia Greenway and trends southeast to Pantano Wash Trail. It intersects the Power Line Path.

#### **Cortaro Farms Road Path (P009)**

The Cortaro Farms Road Path, six and nine-tenths miles, connects the Silverbell Road Path to the La Cañada Drive Trail. It intersects the Santa Cruz and Cañada del Oro river parks.

#### **David Bell Path (P010)**

The David Bell Bicycle and Pedestrian Path is a path, approximately ten feet wide, that presently encircles the east half of Reid Park, a distance of almost three miles. The path is popular with cyclists, runners, walkers, skaters, wheelchair users, and stroller pushers. It is set to be expanded in using funding secured from the RTA shared use pathways





program. The new segment, the northern leg of which will be a section of the Arroyo Chico Greenway, will encircle the remaining west portion of Reid Park, and will add almost one and one-half miles to the path.

## **Escalante Path (P011)**

The Escalante Bicycle and Pedestrian Path is just over a mile in length, and stretches from Wilmot Road on the west to Kolb Road on the east. The pathway jogs at its west end, and includes two short segments along Calle Polar (1,250 feet) and Nicaragua Street (1,150 feet). This pathway could benefit from the installation of additional landscaping, particularly trees, and the path will eventually need to be widened to 12 feet to accommodate future use loads.

## **Gladden Farms Path (P012)**

Gladden Farms Path bisects the Gladden Farms subdivision. It extends west three-tenths-mile path that connects the Moore Road and Tangerine Road paths.

## **Glover Road Path (P013)**

The proposed Glover Road Path extends one-third mile west of the La Cholla Boulevard Path.

## **Golf Links Path (P014)**

The Golf Links Bicycle and Pedestrian Path is approximately four miles long, from Alvernon Way on the west end, where it connects with the Barraza/Aviation Bicycle and Pedestrian Path, to Alamo Wash Greenway on the east. The segment of path between Alvernon Way and Craycroft is located on the north side of Golf Links, where it connects to Freedom Park and Golf Links Sports Complex. The segment between Craycroft and Alamo Wash Greenway is located on the south side of the road. The Golf Links path provides a trail system link to the proposed Golf Links Trails Park. This path would benefit from widening the path to the 12-foot standard as user loads increase. It could also benefit from a bridge over the Craycroft/Golf Links intersection to allow the path to transition from the north to the south side of Golf Links without requiring users to cross this high-volume intersection at grade.

## **Greasewood Path (P015)**

Two short paved path segments presently exist along the west side of Greasewood Road: a quarter-mile section between Anklam Road and the Broadway Boulevard alignment, and an 1,100-foot long segment situated between Starr Pass Boulevard and a point approximately 120 feet south of Brandy Crest Drive. Sufficient right-of-way exists to



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connect these two pathways, and connect multiple neighborhoods and Tolson Elementary School with Greasewood Park and Pima College.

#### **Hughes/Alvernon Path (P016)**

The proposed Hughes/Alvernon Path follows Hughes and Alvernon roads around the east and south sides of Tucson International Airport. The path connects the UPRR Greenway on the southwest to the Rodeo Wash on the northeast. It intersects the Power Line Trail, Airport Wash North Trail, and Airport Wash Path.

#### **Kino Parkway Path (P017)**

The proposed Kino Parkway Path connects the Barraza/Aviation path on the north to the Julian Wash Greenway on the south, a distance of approximately two and eight-tenths miles. It passes Quincie Douglas Park and the proposed The Habitat Trails Park and intersects the proposed trail that connects Quincie Douglas Park to James Thomas Park and the El Paso and Southwest Gas Greenway.

#### **Kolb Road Path (P018)**

The Kolb Road Path has two segments, one on either side of Davis-Monthan AFB. The proposed north segment is a mile-long pathway located on the west side of Kolb Road; it provides a link between the east end of the existing Escalante Bike and Pedestrian Path and the west end of the future four-mile long Irvington Greenway. Because the corridor is narrow in this area, and grade differentials may be an issue, the pathway may need to be located on the edge of the Davis-Monthan AFB property, which would require the base's security fence be inset 20 feet. This could be feasible as the property in this section is owned by the City of Tucson, and the property is being used as part of the base's airplane storage facility, which has relatively low security requirements compared to the core of the base. The southern segment is approximately one and six-tenths miles from Valencia Greenway to Julian Wash Greenway.

#### **La Cañada Drive North Path (P019)**

The proposed two-mile La Cañada Drive North Path Narana Drive West Path on the south to Moore Road on the north. It intersects with Tangerine Greenway.

#### **La Cañada Drive South Path (P020)**

The proposed seven-tenths mile La Cañada Drive South Path connects Lambert Lane on the north to Cañada del Oro River Park on the south.



#### **La Cholla Boulevard Path (P021)**

The La Cholla Boulevard Path is a half-mile path that connects Glover Road Path on the north to Naranja Road West Path on the south.

#### **Lambert Lane Path (P022)**

The Lambert Lane Path is a two and one-third mile path that connects La Canada Drive South Path on the west to 1st Avenue Path on the east.

#### **Marana Road Path (P023)**

The Marana Road Path is a one and three-tenths mile path that connects the Central Arizona Project and Butterfield Stage Route trails. It intersects the Unnamed 20 Path at Adonis Road.

#### **Mission Road Path (P024)**

The proposed Mission Road Path begins on the north end at Congress Road, where the Silverbell Road Path begins heading north. Mission Road Path continues south on Mission Road to the boundary of the San Xavier Indian Community. It intersects the proposed Cholla Wash, Connection to Habitat for Humanity, and Enchanted Hills Wash trails and Ajo Greenway.

#### **Moore Road Path (P025)**

The Moore Road path is approximately two miles. It connects the Butterfield Stage Route trail to Tangerine Road Path. It intersects Postvale Road and Gladden Farms Road paths.

#### **Naranja Road East Path (P026)**

The Naranja Road East Path extends approximately one-tenth miles west of Copper Creek Drive.

#### **Naranja Road West Path (P027)**

The Naranja Road West Path is approximately one mile and connects La Cholla Boulevard Path on the west to La Cañada Drive North Path on the east.

#### **Old Spanish Trail Path (P028)**

The Old Spanish Trail Bicycle and Pedestrian Path presently stretches 16.8 miles from Broadway Boulevard to the main gate of the Rincon Mountain District of Saguaro National Park. The path was originally constructed at eight feet wide. Several short segments adjacent to new subdivisions have been installed at the preferred 12-foot wide path standard. The Old Spanish Trail Bicycle and Pedestrian Path was originally intended to extend from Broadway Boulevard all the way east



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to Colossal Cave Mountain Park, and this plan re-confirms that intent. In fact, several segments of the path have already been constructed in the Rincon Valley as new subdivisions have developed. The primary challenge to overcome in order to construct a continuous path from Broadway Boulevard to Colossal Cave Mountain Park is a narrow section of right-of-way about two miles south of the current end of the pathway at Saguaro National Park's main gate. There are precipitous drop-offs a few feet from the existing east edge of pavement in this area that will require adjusting the roadway in order to fit the path into this stretch of corridor.



#### **Postvale Road Path (P029)**

Postvale Road Path is a one-mile path that connects Tangerine Road Path on the south to Moore Road Path on the north.

#### **Power Line Path (P030)**

The proposed Power Line Path begins on the north at the Pantano Wash Trail and extends 7 miles south to the Gas Line Trail that parallels Interstate 10 on the north side. It intersects Drexel Road Trail, Civano Wash South Greenway, Valencia Greenway, Civano Wash Path, Atturbury Wash North Fork Greenway, and Esmond Station Greenway.

#### **Robb Wash Path (P031)**

The Robb Wash Path departs from the Old Spanish Trail Path just south of Broadway Boulevard and continues south one mile to 22nd Street, just west of Camino Seco. It intersects with the Arroyo Chico East Greenway.

#### **Sanders Road Path (P032)**

Sanders Road Path is just under one mile long. It follows Sanders Road from Grier Road on the north to approximately Ohms Way on the south. It intersects Barnett Road Path.

#### **Silverbell Road Path (P033)**

The proposed Silverbell Road Path follows Silverbell Road from Congress Street on the south to Twin Peaks Road on the north. It intersects or passes several features including: Christopher Columbus Park, Cortaro Farms Road Path, and numerous backcountry trails.

#### **Speedway Path (P034)**

Speedway Path is just a quarter-mile long, ten-foot wide path, located on the north side of Speedway between Saddlewood Ranch Drive on the east and Camino de Juan on the west. However, this short path



receives a surprising amount of use from local residents. Opportunities to expand the path within the Speedway right-of-way, and to link the path to the City of Tucson's Greasewood Park should be considered.

## **Tangerine Road Path (P035)**

Tangerine Road Path is a four and two-tenths mile path that circles south to east from Barnett Road to Interstate 10. It intersects Moore, Gladden Farms, and Postvale road paths, and Unnamed 22 and Unnamed 23 paths.

## **Unnamed 20 Path (P036)**

Unnamed 20 Path is three and three-tenths miles. It is on the north side of Interstate 10 between approximately Magic Song Street and one mile north of Hardin Road.

## **Unnamed 21 Path (P037)**

Unnamed 21 Path is a half-mile path between Moore and Barnett roads paths on the alignment of Lon Adams Road.

## **Unnamed 22 Path (P038)**

A two-mile path from Tangerine Road Path on the south to Butterfield Stage Route Trail, just south of Barnett Road, on the north. It intersects Moore Road Path.

## **Unnamed 23 Path (P039)**

A one and seven-tenths mile path from Tangerine Road on the south to Unnamed 21 path on the north. It intersects Postvale Road and Moore roads paths.

## **Wentworth Road Path (P040)**

The proposed Wentworth Road Path follows Wentworth and Colossal Cave roads and connects Pantano Wash Trail to the Power Line Greenway. It intersects the Esmond Station Greenway and Gas Line Trail which parallels Interstate 10 on the north side. The path parallels a trail on the south side of the road.

## **Wilderness Path (P041)**

Wilderness Path is a two-mile path that parallels Ranch Sahuarita Boulevard about one-half mile to the west, just beyond Camino Tierra Alegro. It creates a loop with Rancho Sahaurita Boulevard.

## **Wilmot Road Path (P042)**

The three-quarter mile Wilmot Road Path connects Golf Links Road Path on the north to Escalante Path on the south.



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## ***River Parks***

River Parks are essential to the Pima Regional Trail System. They are green corridors with paths and trails located along the metropolitan area's major watercourses, and are the broadest and most highly developed elements of the trail system. Per existing County ordinances, River Parks are intended to be a minimum of 100 feet in width or wider, and to be developed at the Divided Urban Pathway standard, on both sides of the river, to safely accommodate the widest spectrum of users, including walkers, runners, equestrians, cyclists, roller bladers, wheelchair users, stroller pushers, and more. Examples of River Parks include the Santa Cruz, Rillito, Pantano, and Tanque Verde river parks.



River Parks are also major elements of the community's green infrastructure system and provide a wide range of related benefits, including reducing the urban heat island effect, urban wildlife habitat, aesthetic enhancement, and shade. The provision of a high quality River Park system also provides opportunities for alternate modes of transportation. Connectivity with other trails, workplaces, shopping, parks, schools, residential communities, and more will be stressed as the system develops to achieve maximum functionality.

### **Big Wash River Park (RP001)**

The Town of Oro Valley intends to build a river park along Big Wash from the confluence of Big Wash and the Cañada del Oro Wash to the Pinal County boundary. Big Wash River Park will include a paved shared-use path on the east side of the wash. The alignment has been established to a point north of the Hospital - but from there north it is still undetermined. The current plans for development do not call for full river park development but it has been identified in the RTA as a River Park so is being kept in the river park classification.

### **Cañada del Oro River Park (RP002)**

The Cañada del Oro (CDO) Wash corridor stretches approximately nine miles from Oracle Road on the east to its confluence with the Santa Cruz River on the west. The wash continues into Catalina State Park and northeast through the Catalina area into Pinal County, but only the segment west of Oracle Road will be developed as a River Park. The CDO passes through three local jurisdictions: Oro Valley, unincorporated Pima County, and Marana. Funding provided through the 1997 and 2004 Bond Programs has allowed the River Park to develop in both Oro Valley and Pima County.







## **Pantano River Park (RP003)**

The 18-mile Pantano River Park is located on the east side of the metropolitan area. The Pantano River Park corridor begins at the northern end of the Cienega Creek Preserve and terminates at its confluence with the Rillito River and the Tanque Verde Wash. Developing River Parks on both banks of the Pantano will be a challenge. Development encroached into the River Park corridor over the past thirty years, making retrofitting a difficult and expensive task. At the south end of the Pantano corridor, a geographic feature called the Pantano Bluffs, located on the west bank, represents a significant challenge for River Park siting. A number of significant drainages and erosion cuts in this area will need to be addressed to implement the River Park. Despite these challenges, development of the Pantano River Park is underway, and many segments offer excellent opportunities for development, such as portions of the west bank, south and north of Broadway, next to closed landfill sites.



## **Rillito River Park (RP004)**

The Rillito River Park is Tucson's most used River Park and the nearest to completion. The 11-mile corridor, located at the base of the foothills of the Santa Catalina Mountains, connects the Santa Cruz River with the Tanque Verde and Pantano washes. While a variety of major impediments still exist on both river banks, considerable progress has been made over the years. However, there are a variety of projects currently pending.

## **Santa Cruz River Park/Anza National Historic Trail (RP005)**

The Santa Cruz River Park was the Tucson metropolitan area's first River Park. Planning for the Santa Cruz River Park began in the late 1970s, and the first development project was implemented in the early 1980s. Despite its status as the original River Park in the shared use pathway system, this park has significant gaps, and a number of segments that are now aging to the point that they need to be redeveloped and brought up to current standards. Some segments are also very narrow and need to be widened. The Juan Bautista de Anza National Historic Trail is located along the west side of the Santa Cruz River corridor, and provides the park with a valuable historic feature (also see the section of Trails of National Significance). The Santa Cruz corridor crosses three jurisdictions: Marana, Tucson, and Pima County.

## **Tanque Verde River Park (RP006)**

The entire length of the Tanque Verde Wash appears on the Pima Regional Trail System Master Plan as a trail corridor, but only a portion

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of the Wash is suitable for River Park development. That suitability relates to two main considerations—the extent of existing bank protection and the character of the watercourse east of the wash’s intersection with Tanque Verde Road. Portions of the Tanque Verde River Park are bank protected. The bank protection provides the necessary pre-requisite for River Park development—a stable bank and the acquisition of some of the right-of-way necessary to accommodate the River Park. No bank protection exists downstream of Tanque Verde Road, in part because of the nature of the wash in this area. East of Tanque Verde Road, the wash is less incised and more susceptible to flooding, which makes it ill-suited for River Park development and much better suited to a backcountry trail. Therefore, given these existing conditions, the River Park will be developed only between Tanque Verde Road and the Rillito River, a distance of approximately three miles.



### **Greenways**

Greenways exist throughout the United States and are defined in a variety of ways, as the following definition drawn from Charles E. Little’s book *Greenways for America* demonstrates:

*Greenway: n. 1. A linear open space, established along either a natural corridor such as a riverfront, stream valley, or ridge line, or overland along a railroad right-of-way converted to recreational use, a canal, a scenic road, or other route. 2. Any natural or landscaped course for pedestrians or bicycle passage. 3. An open space connector linking parks, nature reserves, cultural features, or historic sites with each other and with populated areas. 4. Locally, certain strip or linear parks designated as parkway or greenbelt. (American neologism: green + way; origin obscure).*

For these projects, a greenway is defined as “a linear pathway within a landscaped corridor of varying widths that is not located along one of the community’s major watercourses.” The first greenway to be developed in the metropolitan area was the Tucson Diversion Channel segment of the Julian Wash Linear Park, which is now known as the Paseo de Lupe Eckstrom. Because the Julian Wash Linear Park is not a River Park in the conventional sense, it has been included in the greenway category, and, in the interest of simplicity and consistency, its name has been changed to the Julian Wash Greenway.

Development of the Julian Wash Greenway was followed in 2001 by the Houghton Greenway, the first section of which was created as a part of the Mesquite Ranch Subdivision. Since that time, greenway planning and development has accelerated significantly and a number of



greenway projects are either underway or in the planning stages around the metropolitan area, including: the Camino Loma Alta Greenway in the Rincon Valley; the El Paso and Southwestern Greenway in downtown Tucson; the Arroyo Chico Greenway in midtown Tucson; the Rodeo Wash Greenway in southwest Tucson; and the Rita Greenway in Rita Ranch. A total of 29 greenways are identified in this plan, but opportunities to create new greenways in developing parts of the community, or as retrofits into already developed areas, should continue to be explored.

## **Airport Wash Greenway (G001)**

The proposed Airport Wash Greenway is approximately two and four-tenths miles in length, and connects the Santa Cruz River Park to Nogales Highway. The wash corridor exceeds 200 feet in width in some places, and is an excellent candidate for greenway development. The corridor connects Santa Cruz River Park, Tucson Spectrum "power center," several neighborhoods, and the Airport. This corridor may become a demonstration project for the Tucson-Pima County Green Infrastructure Plan.

## **Airport Wash North Greenway (G002)**

The Airport Wash North Greenway is approximately one and one-tenths mile. It trends east to west from Wilmot Road Greenway. At either end of the greenway, the Airport Wash North Trail continues.

## **Ajo Way Greenway (G003)**

Ajo Way Greenway is a proposed 14-mile greenway that trends east to west from Santa Cruz River Park to Sandario Greenway. It crosses Mission Road Path, Manzanita Greenway, and several backcountry trails including Central Arizona Project and Black Wash.

## **Alamo Wash Greenway (G004)**

The Alamo Wash is a multi-use path through midtown. The alignment of the greenway loosely follows the Alamo Wash and will take on many forms along its route. It will include segments located along the Alamo Wash as well as alley and street-side segments. The route begins at Escalante Road, east of Kolb Road, and ends Arcadia Wash Greenway and Glenn Street. It will connect many prominent recreational, cultural, and educational destinations including Palo Verde High School, the Park Place Mall, Whitmore Elementary School, Dodge Traditional Magnet School, Wheeler Elementary School, the Tucson Medical Center, the Pantano River Park, and several midtown parks.



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### **Arcadia Wash Greenway (G005)**

The Arcadia Wash Greenway is a multi-use path through midtown that connects the Rillito River Park to the Golf Links Road Path. The alignment of the greenway loosely follows the Arcadia Wash and will take on many forms along its route. It will include segments along the Arcadia Wash, as well as street-side segments. The Arcadia Wash Greenway will connect many prominent recreational, cultural, and educational destinations including Davis-Monthan AFB, Corbett Elementary School, Rincon High School, the Arroyo Chico East Greenway, the Williams Center business complex, the Third Street Bicycle Boulevard, the Crossroads Festival Shopping center, the Tucson Medical Center, and several midtown parks.



### **Arroyo Chico East Greenway (G006)**

The Arroyo Chico East Greenway links Randolph Park on the west to to Old Spanish Trail Path on the east, a distance of six miles. It intersects Arcadia Wash Greenway, Sahuara Avenue Bicycle Boulevard, Alamo Wash Greenway, Rose Hill Wash Greenway, Pantano River Park, and the Robb Wash Path. In addition to Randolph Park, it connects Linden, Stefan Gollob, and Palo Verde parks to the surrounding neighborhoods. There are also several schools along the route: Vail Middle, Rogers Elementary, Kellund Elementary, and Steele Elementary.

### **Arroyo Chico West Greenway (G007)**

The Arroyo Chico West Greenway is a three-mile, multi-use path connecting Reid Park with downtown. The Greenway will include segments following the Arroyo and Citation washes, as well as street-side and alley segments. This Greenway provides regional connectivity by making connections with other paths and bicycle routes including the Arroyo Chico Greenway, the proposed Treat Avenue Bicycle Boulevard, the David Bell Path at Reid Park, the Barazza/Aviation Path, the Highland Avenue bicycle lanes, and the downtown links bicycle/pedestrian path that leads to the El Paso and Southwestern Greenway and the Santa Cruz River Park west of downtown. The route will connect recreational, cultural, and educational destinations including Reid Park, Robison Elementary School, Howenstine Magnet High School, the University of Arizona athletic complex, Cherry Fields sports complex, Ironhorse Park, San Antonio Park, El Con Mall, the Doubletree Hotel on Alvernon, Hardesty Service Center, Randolph Recreation and Tennis Center, several churches, and numerous downtown destinations.





#### **Atturbury Wash Greenway (G008)**

The Atturbury Wash Greenway is a planned recreational corridor that will generally follow the Atturbury Wash from Houghton Road Greenway (south of Valencia Greenway) north to the Pantano River Park. It will serve as a link between several important community facilities and will enable the restoration of portions of the wash that were previously disturbed. This greenway will feature a path, trail, landscape improvements, and other site amenities such as seating areas and drinking fountains. The length of the corridor is approximately eight and eight-tenths miles. Atturbury Wash Greenway will connect several parks, recreation areas, and community facilities. These include (from south to north) Fantasy Island Trails Park, Pima Community College East Campus, the City of Tucson's Clements Community Center, Lincoln Regional Park, Atturbury/Lyman Wildlife Sanctuary, Santa Rita High School, Lakeside Park, Ford Elementary School, and Carson Middle School.

#### **Atturbury Wash North Fork Greenway (G009)**

The Atturbury Wash North Fork Greenway begins at Fantasy Island Trails Park on the north and trends southeast for approximately seven and six-tenths miles to near Mary Ann Cleveland Way.

#### **Atturbury Wash South Fork Greenway (G010)**

Atturbury Wash South Fork Greenway is approximately one and nine-tenths miles long. It trends northwest to southeast and is approximately half way between Esmond Station Greenway and Atturbury Wash North Fork Greenway, south of Mary Ann Cleveland Way.

#### **Avra Valley Greenway (G011)**

The proposed Avra Valley Greenway would be located along Avra Valley Road near Marana, and would traverse a distance of approximately 15 miles, from Interstate 10 on the east to Pump Station Road on the west. This proposed greenway provides many linkages, including, from east to west, the Santa Cruz River and Anza National Historic Trail, the CAP National Recreation Trail, Marana's BOR Regional Park, the Marana Northwest Airport, Sandario Greenway, and Ironwood Forest National Monument.

#### **Broadway Boulevard Greenway (G012)**

The proposed Broadway Greenway would be along the north side of Broadway Boulevard, roughly from the Snake Bridge and Iron Horse Park to El Con Mall. The Broadway Boulevard Greenway could be planned and executed as a part of the Broadway Boulevard widening project.

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Developing the Broadway Boulevard and Arroyo Chico greenways would establish a mid-town loop that would provide recreational and alternative transportation mode opportunities to a large number of area residents.

#### **Camino Loma Alta Greenway (G013)**

Camino Loma Alta Greenway is located on the east side of Camino Loma Alta and is a total of five and one-half miles. It stretches from Papago Springs Road north to Coronado National Forest. Several short segments of the greenway have already been constructed as part of residential development projects. It intersects Old Spanish Trail Path, Rincon Creek Greenway, and several backcountry trails.

#### **Citation Greenway (G014)**

The one and one-half-mile Citation Greenway is a proposed greenway that connects Reid Park and the David Bell Path with the proposed 100-acre Golf Links trails park property. The corridor is narrow in places, and crosses both 22nd Street and Alvernon Way. Most of the corridor is already in public ownership, including the north end where it crosses a site owned by Pima County.

#### **Civano Wash North Greenway (G015)**

Civano Wash North Greenway is approximately one and three-tenths miles. It begins just south of Pantano Wash Trail and extends south to approximately Bilby Road where it becomes the Civano Wash Trail.

#### **Civano Wash South Greenway (G016)**

Civano Wash South Greenway is a short greenway that begins at Poorman Road and Power Line Path and trends southeast and south for eight-tenths of a mile.

#### **El Paso and Southwestern Greenway (G017)**

The El Paso and Southwestern Greenway is the region's lone rails-to-trails conversion project to date. It traverses approximately six and one-half miles of the decommissioned El Paso and Southwestern rail corridor from the vicinity of the University Boulevard alignment to Pima County's Kino Environmental Restoration Project. A conceptual master plan for the El Paso and Southwestern Greenway was prepared by the Drachman Institute in 2005, and was adopted by the Tucson City Council for use as guidance in the development of the greenway. The Regional Transportation Authority program, approved by the voters in May 2006, included \$3.2 million in funding for the development of the greenway, and a federal Transportation Enhancements grant has





been secured to help implement the initial phase of the project. The first segment of the greenway is being developed as a part of Tucson's Fire Central headquarters building, and a new detailed master plan is presently being prepared using a portion of RTA funding.

### **Esmond Station Greenway (G018)**

The proposed Esmond Station Greenway is approximately five miles in length and follows an abandoned rail line. It extends from the Houghton Road Greenway through the Esmond Station site down to Wentworth Road. In addition to its historical value, the greenway will provide a link to a large park that will be built by the City of Tucson around the Esmond Station site.

### **Estes Wash Greenway (G019)**

Estes Wash Greenway begins at the Tanque Verde River Park, midway between Harrison and Houghton roads, and continues south and east to Houghton Road Greenway. Near its terminus at Tanque Verde River Park, it intersects the Coronado Ridge Wash Trail. At its terminus at Houghton Road it connects to the Estes Wash Trail which continues further south and east. Between Broadway Boulevard and 22nd Street, it provides access to Case Park.

### **Flato Wash Greenway (G020)**

Flato Wash Greenway is a proposed greenway that trends west to east from the UPRR Greenway to the Sonoita Greenway, a distance of over 18 miles. It intersects the Swan, Wilmot, Sarnoff, and Houghton roads greenway.

### **Franco Wash Greenway (G021)**

Franco Wash Greenway is a proposed greenway that trends west to east from Old Vail Road to Houghton Road, a distance of eleven and four-tenths miles. It connects the Old Vail/Harrison, Swan, Wilmot, and Sarnoff greenways with the Houghton Road Greenway. It crosses through the Southeast Regional Park.

### **Greasewood Road Alignment Greenway (G022)**

The Greasewood Road Alignment Greenway is one and one-quarter miles and connects Cholla Wash Trail on the north to Explorer Backcountry Trail on the south. It intersects two trails - the connection to Habitat for Humanity Trails Park and Enchanted Hills Wash.



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### **Hidden Hills Wash Greenway (G023)**

Hidden Hills Wash Greenway begins at the Tanque Verde River Park, midway between Camino Seco and Harrison Road, and continues southeasterly to Houghton Road Greenway. There are four schools in the vicinity of the Greenway: Academy of Tucson Elementary, Tucson Country Day, Wrightstown Elementary, and Gridley Middle. At its terminus at Houghton Road it connects to the Hidden Hills Wash Trail which continues further south and east.



### **High School Wash Greenway (G024)**

Two-mile High School Wash Greenway connects the Arroyo Chico Greenway to Wilson Avenue, intersecting the Highland Avenue Enhanced Corridor and Tucson High Magnet School.

### **Houghton Greenway (G025)**

Houghton Greenway is on the east side of Houghton Road. It is planned for almost the entire 21 miles of roadway, from Camino Aurelia at its south end to as far north as existing right-of-way will allow, which is approximately Tanque Verde River Park. North of Tanque Verde River Park, the existing right-of-way is considerably narrower and the greenway becomes Houghton Road Trail, on the east side of the road. The concept for the Houghton Greenway is to link the Santa Catalina and Nogales ranger districts of the Coronado National Forest.

### **Irvington Greenway (G026)**

Irvington Greenway is located on the south side of Irvington Road, and extends from Houghton Road to Kolb Road, a distance of four miles. The Irvington Greenway would link the Houghton Road Greenway with the proposed Kolb Road Path, as well as the Fantasy Island trails park, the Atturbury Greenway, Lincoln Park, and Kinnison Wash Greenway. There is considerable public right-of-way along the south side of Irvington Road where the greenway could traverse the four miles virtually uninterrupted.

### **Julian Wash Greenway (G027)**

Julian Wash Greenway stretches approximately 18 miles across the southern edge of Tucson, from the Santa Cruz River to the Houghton Road corridor. The Julian Wash Greenway is the southern leg of The Loop. The westernmost portion of the greenway coincides with the Tucson Diversion Channel, the greenway improvements of which are called the Paseo de Lupe Eckstrom. Several segments of the Julian Wash Greenway have either been developed or are pending development, including a



2004 Pima County Bond project crossing the University of Arizona's Science and Technology Park.

### **Kinnison Wash Greenway (G028)**

The proposed Kinnison Wash Greenway would stretch from the intersection of Irvington and Kolb roads to Lakeside Park along the Kinnison Wash. At the Irvington and Kolb intersection, the greenway would link with the proposed Irvington Greenway and/or the proposed Kolb Road Path, and, at its northern end, a connection from the Kinnison Greenway could be fashioned with the Atturbury Wash Greenway at Lakeside Park. At its southern end, the Kinnison Wash crosses through an 80-acre parcel of State Trust Land that could be acquired and made into a Kinnison Trails Park. The greenway also connects to Groves Park.

### **Kolb South Greenway (G029)**

Kolb South Greenway is a three and seven-tenths mile long greenway. It extends south from the Julian Wash Greenway at Via Rio Pico to a mile south of Old Vail Road/Harrison Road Greenway. It intersects Airport Wash North and Power Line trails.

### **Manzanita Greenway (G030)**

Manzanita Greenway is located along the west side of Westover Road in a corridor formerly owned by El Paso Natural Gas, and is approximately three and seven-tenths miles in length. The corridor runs from Ajo Way Greenway on the north end to Gas Pipeline Backcountry Trail, approximately 3,500 feet south of Valencia Road. The proposed greenway is a broad corridor, up to 300 feet wide, with potential for development of a trail with lush desert vegetation and various park nodes along its length. The Greenway could provide access to Manzanita Park and Robles Pass Trails Park.

### **Navajo Wash Greenway (G031)**

Navajo Wash Greenway begins at Glenn Street Enhanced Corridor and continues north to Hedrick Drive where it turns west and extends to the Santa Cruz River Park, total length approximately five and one-third miles. Navajo Wash is sometimes called Cemetery Wash at its west end. There are segments of the 'wash' that could be improved because they are no more than an inverted crown at the center line of a street. Navajo Wash Greenway links Mountain Avenue, Stone Avenue, and Fairview Avenue enhanced corridors.



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### **Old Vail/Harrison Greenway (G032)**

The proposed Old Vail/Harrison Greenway begins at the intersection of Old Vail Road and the UPRR Greenway. It continues east on Old Vail Road and turns south at the Harrison Road alignment and continues south to the proposed Franco Wash Greenway. It intersects the proposed Swan, Wilmot, Kolb South, and Sarnoff greenways.



### **Palo Verde Greenway (G033)**

The three and one-quarter-mile Palo Verde Greenway is capable of connecting the proposed Golf Links trails park with the Barraza/Aviation Path, the Kino Environmental Restoration Project, and the Julian Wash Greenway. This alignment has challenges, primarily the crossing of major roads such as the Barraza Parkway and Ajo Way and some land is needed to make the route continuous. However, the majority of the corridor is in public ownership, easing greenway implementation.

### **Power Line Greenway (G034)**

The proposed Power Line Greenway begins at the Power Line Trail on the west, where it intersects with Houghton Road Greenway. It continues east along the power line easement for six miles until it intersects with Sonoita Greenway.

### **Rancho Valencia North Greenway (G035)**

Rancho Valencia North Greenway is a branching greenway of a total one and two-tenths miles. The main segment is one mile from Swan Road Greenway east to the approximate Lantana Vista Drive alignment. This segment connects two portions of the Rodeo Wash Greenway. The short branch of the greenway is approximately two-tenths of a mile and connects the main segment to Interstate 10.

### **Rincon Creek Greenway (G036)**

The proposed Rincon Creek Greenway is approximately four and six-tenths miles in length, and traverses the south side of Rincon Creek from the creek's confluence with the Pantano Wash across Rocking K Ranch to the Camino Loma Alta Greenway. Land for the greenway corridor was secured across Rocking K Ranch in 1996 as a condition of approval of the Rocking K Ranch Specific Plan. A separate agreement, called the Rocking K Ranch Trails and Park Sites agreement, contains details regarding the corridor and other trails that cross the Rocking K property. The Rincon Creek Greenway would connect with the 39-acre Rocking K district park site, which is located directly across Old Spanish Trail from the Rincon Creek General Store.



### **Rita Ranch Greenway (G037)**

Rita Greenway is located along the north edge of Rita Road within the Rita Ranch subdivision. The greenway is approximately three miles long and connects Houghton Road on the east to Julian Wash Greenway on the south, circling the Rita Ranch detention basin. The path needs improvement to better define its alignment. An extension into the University of Arizona's Science and Technology Park is also possible. The first segment of the Rita Greenway, across the Fry's shopping center property at its east end, has been constructed. The development of additional segments will require Transportation Enhancement grant funding or the creation of a dedicated funding source.

### **Robb Wash Greenway (G038)**

Robb Wash Greenway connects, on its north end, the Tanque Verde River Park and, on its south end, Old Spanish Trail Path at Broadway Boulevard. It is approximately two and four-tenths miles.

### **Rodeo Wash Greenway (G039)**

Rodeo Wash Greenway is approximately 10.5 miles long, and extends from the Santa Cruz River Park to Wilmot Road Greenway. One segment of the greenway has already been constructed as a part of the new Tres Pueblos development project between Campbell Avenue and Country Club. Rodeo Wash Greenway links a river park, three parks, two detention basins, and four schools.

### **Rolling Hills Wash Greenway (G040)**

Rolling Hills Wash Greenway is a two and two-tenth miles long greenway that starts at Pantano River Park and continues east and south to its terminus at Golf Links Road.

### **Rose Hill Wash Greenway (G041)**

Rose Hill Wash Greenway begins at 22nd Street on the south and continues north to Pantano River Park, almost six miles. The greenway skirts around Dorado Country Club golf course. Rose Hill Wash Greenway intersects Arroyo Chico East Greenway and Third Street Bicycle Boulevard.

### **Sabina Canyon Road Greenway (G042)**

The Sabino Canyon Road Greenway is a proposed greenway that connects the Tanque Verde River Park to the Coronado National Forest at approximately Sunrise Drive.



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### **Sahuarita Greenway (G043)**

Sahuarita Greenway is located along the north side of Sahuarita Road, and runs from Mission Road, on its west end, to Highway 83, on its east end, a distance of approximately 23 miles. The Greenway connects the Town of Sahuarita, the Santa Cruz River Park/Anza National Historic Trail, the Houghton Greenway, and the Arizona Trail. The majority of the route is presently undeveloped, making future implementation easier.



### **Sandario Greenway (G044)**

Sandario Greenway is a proposed greenway that, like the Houghton Greenway, covers a considerable distance—a total of 19.8 miles, from Avra Valley Road to Ajo Highway. The greenway would be located along the west side of Sandario Road, and would connect to both Ajo Highway, Avra Valley Greenway, the CAP National Recreation Trail, and Marana High School.

### **Sarnoff Drive Greenway (G045)**

The proposed Sarnoff Drive Greenway, nine and seven-tenths miles, follows the Sarnoff Drive alignment south from the Julian Wash Greenway to Sahuarita Greenway. It intersects the proposed Old Vail/Harrison, Franco, Flato, and Southlands greenways.

### **Sonoita Greenway (G046)**

The proposed Sonoita Greenway would be located along the west side of Highway 83, between Interstate 10 and Sahuarita Road, a distance of approximately two and nine-tenths miles. The greenway would link Power Line, Flato, and Sahuarita greenway, and the Arizona Trail. It would also connect with a new trailhead at the intersection of Sahuarita Road and Highway 83.

### **Southlands Greenway (G047)**

The Southlands Greenway is a proposed 10.8 miles greenway between the UPRR and Houghton Road greenways. The greenway provides another east/west greenway alignment between the Flato and Sahuarita greenways with an approximate 2 mile spacing.

### **Swan Road Greenway (G048)**

The proposed Swan Road Greenway is on the east side of Swan Road from the Rodeo Wash Greenway to the Sahuarita Road Greenway. It intersects the Airport Wash North and Power Line trails, the proposed Old Vail/Harrison, Franco, Flato, and Southlands greenways.





**Sycamore Canyon Greenway (G049)**

The Sycamore Canyon Greenway is approximately two and seven-tenths miles, along the east side of the Harrison Road and Sycamore Leaf Road alignments within the Sycamore Canyon subdivision, which is located one mile west of Houghton Road and one mile south of Sahuarita Road. Additional paths will be constructed in this 1,100 home subdivision in the future. The pathway links this new neighborhood with the Sahuarita Road Greenway.

**Tangerine Greenway (G050)**

The proposed Tangerine Greenway would be located along the north side of Tangerine Road from the Santa Cruz River corridor to the vicinity of Big Wash in the Town of Oro Valley, a distance of approximately 14.5 miles. This corridor represents a regional link across the extreme northwest metropolitan area, and would connect Big Wash Greenway with the Santa Cruz River Park and the CAP Trail. With planning underway for development at all four corners of Tangerine and Interstate 10 in the Town of Oro Valley, the time is now to determine how best the Tangerine Greenway and the CAP Trail will pass through this area.

**UPRR Greenway (G051)**

The UPRR Greenway begins where Airport Wash Greenway ends, just north of Valencia Road, and continues 12.6 miles south to Sahuarita Greenway. It connects Hughes/Alvernon Path, and Old Vail/Harrison, Flato, and Southlands greenways.

**Valencia Road Greenway (G052)**

Valencia Greenway is located on the east end of the Valencia corridor, and extends from Valencia Road's connection with Rincon Creek Greenway to Kolb Road Path, a distance of approximately seven and one-half miles. Regional trail connections include the Houghton, Atturbury Wash, and Atturbury Wash North Fork greenways.

**Wilmot Road Greenway (G053)**

The proposed Wilmot Road Greenway is on the east side of Wilmot Road from the Julian Wash Greenway to the Sahuarita Road Greenway. It intersects the Rodeo Wash Greenway, Airport Wash North Greenway, Power Line Trail, and the proposed Old Vail/Harrison, Franco, Flato, and Southlands greenways.



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### ***Enhanced Bicycle/Pedestrian Corridors***

Enhanced bicycle/pedestrian corridors generally follow existing local or collector streets that carry a relatively low volume of automobile traffic. They are intended to be safe and attractive corridors that encourage bicycle and pedestrian use. Essential improvements include continuous bicycle lanes and continuous sidewalks with handicap ramps. Landscape plantings, street furniture, transit shelters (where appropriate), and public art should also be included along these corridors.



#### **10th Avenue/12th Avenue (EC001)**

The 10th Avenue/12th Avenue corridor begins in downtown Tucson and extends to Valencia Road.

#### **Columbus Boulevard (EC002)**

Columbus Boulevard is a half-mile, north-south collector street located between Alvernon Way and Swan Road, both of which are designated arterial streets. Columbus Boulevard extends from the Rillito River on the north to 32nd Street and Davis-Monthan Air Force Base on the south. It is proposed that Columbus Boulevard be enhanced to provide safe and attractive bicycle and pedestrian facilities along this corridor. When completed, the Columbus Boulevard Enhanced Bicycle/Pedestrian corridor will connect several residential neighborhoods, Roberts Elementary School, Naylor Middle School, Lineweaver Elementary School, Wright Elementary School, the Lighthouse Branch of the YMCA, McCormick Park, and the Rillito River Park.

#### **Elm Street (EC003)**

Elm Street is an east-west corridor halfway between Speedway Boulevard and Grant Road and connects the Fairview corridor to Pantano Wash. The portion recommended for enhancement is from Stone Avenue on the west to Wilmot Road on the east. Elm Street connects several schools.

#### **Escalante Road (EC004)**

The Escalante Road corridor begins at Kolb Road, at the corner of Davis-Monthan AFB, and continues east to Atturbury Wash Greenway.

#### **Fairview Avenue (EC005)**

Fairview Avenue passes through several neighborhoods, public parks, commercial areas, and industrial districts. If developed as an Enhanced Corridor, it has the potential to connect residential areas with districts where people shop, work, and recreate.



Fairview Avenue terminates on the north at the Rillito River and the Rillito River Park. It extends south past the Auto Mall, to Jacobs Park and Ochoa Park. These are active recreational parks, with sports fields, playgrounds, and a swimming pool. The Jacobs Branch of the YMCA is located within Jacobs Park.

### **Glenn Street (EC006)**

The Glenn Street corridor begins at Fairview Avenue and extends east to Arcadia Wash Greenway.

### **Highland Avenue (EC007)**

The Highland Avenue corridor begins at the University of Arizona Campus and continues to the Arroyo Chico Greenway.

### **Mountain Avenue (EC008)**

Mountain Avenue is, in many ways, the prototype for the Enhanced Bicycle/Pedestrian Corridor proposed for the City of Tucson and eastern Pima County. The corridor features conventional automobile traffic lanes, bicycle lanes buffered by a strip of textured pavement, transit stops, transit shelters, pedestrian walkways, street lights, and landscape.



The Mountain Avenue corridor extends north from the University of Arizona campus to the Rillito River Park, a distance of three and one-half miles. At the south end of the corridor, several grade-separated and signalized at-grade crossings of Speedway Boulevard allow members of University community to gain access to the corridor. From campus, it extends north connecting several residential neighborhoods, Salpointe High School, and Rio Vista Elementary School. At the north end of the corridor, a bicycle/pedestrian only bridge spans the Rillito River and connects the Mountain Avenue Corridor with the Rillito River Park.

To help ameliorate on-campus parking problems, the University of Arizona operates a free shuttle service along Mountain Avenue. This allows individuals to ride the shuttle to campus or park in remote, off-campus locations and conveniently travel to the University.

The section of Mountain Avenue from 2nd Street to Fort Lowell Road has been improved with the features noted above. Improvements to the Fort Lowell Road to Limberlost Road section have been designed but have not yet been constructed.

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### **Ruthrauff/Wetmore (EC009)**

The recommended enhanced portion of this east-west, corridor begins at the Santa Cruz River and Ruthrauff Road and continues east to the half street between La Cholla Boulevard and Flowing Wells Road, turns south to Wetmore Road and continues east to 1st Avenue.

### **Stone Avenue (EC010)**

Stone Avenue extends from the Tucson central business district north to River Road, a distance of approximately five miles. The corridor currently has poorly developed facilities for bicycle and pedestrian traffic, but potential as an enhanced bicycle/pedestrian corridor. With the construction of improvements, the corridor could connect the downtown business district, Pima Community College's Downtown Campus, the 3rd Street Bike Boulevard, Prince Elementary School, Amphitheater Middle School, Don Hummel Neighborhood Park, the Tohono – Transit Center, Tucson Mall, and the Rillito River Park.

A pilot project along the corridor was recently completed by the City of Tucson between 6th Street and University Boulevard. The bicycle, pedestrian, and landscape improvements constructed as part of this project demonstrate the potential for the Stone Avenue corridor.

### **Tucson Boulevard (EC011)**

Tucson Boulevard is a north-south street that extends through central Tucson. Like Mountain Avenue, it is a half-mile street that carries a lower volume of automobile traffic than Campbell Avenue to the west or Country Club Road to the east. It is, however, a principal collector street and will remain as such.

The goal for this corridor should be to provide continuous, safe, and attractive bicycle and pedestrian facilities along the full length of the corridor, from Aviation Parkway on the south to the Rillito River on the north. Developed in this manner, Tucson Boulevard has the potential to serve and encourage alternate modes of transportation along the entire corridor with connections to the Barazza Bicycle/Pedestrian Path, the Arroyo Chico Greenway, the 3rd Street Bike Boulevard, Himmel Park, Cragin Elementary School, and the Rillito River Park.



### ***Bike Boulevards***

Bicycle boulevards are a corridor, typically following a local street or streets, with a low volume of automobile traffic. Local automobile traffic is allowed on these streets, but traffic controls are designed to give priority to bicycles. Features such as TOCAN signaling systems are used at intersections where appropriate.

#### **3rd Street (BB001)**

The 3rd Street Bikeway is an east-west bicycle link that provides an opportunity for individuals residing in central Tucson to safely commute to the University of Arizona campus by bicycle. The east leg of the bike boulevard originates at the Campbell Avenue entrance to the University campus and extends east to Wilmot Road, a distance of approximately six miles. The corridor generally follows the 3rd Street alignment but departs from 3rd Street in a few locations as needed to follow the local street system. The western leg of the bike boulevard extends from the Park Avenue gateway to the University campus west to Stone Avenue.

The corridor features a low-volume of automobile traffic with on-street parking. Traffic control signs restrict automobile access to the corridor in some locations and the posted speed limit does not exceed 30 mph. Key elements of the 3rd Street Bikeway are the traffic control features provided where the corridor crosses major north-south streets, such as at Tucson Boulevard. In this location, a TOCAN user-activated cross-signaling system has been installed to enhance bicycle safety.

#### **Sahuara Avenue Bike Boulevard (BB002)**

The Sahuara Avenue Bike Boulevard begins on the north end at the Alamo Wash Greenway and ends at Golf Links Bicycle and Pedestrian path on the south. This corridor links Park Place into the trail system.

#### **Treat Avenue Bike Boulevard (BB003)**

The Treat Avenue Bike Boulevard begins on the north end at the Rillito River and ends at Barraza/Aviation Bicycle and Pedestrian path at the south.

#### **University Bike Boulevard (BB004)**

The University Bike Boulevard is on University Boulevard, beginning at the west side of the University of Arizona campus and ending at the El Paso & Southwestern Greenway.



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## ***Trails Parks***

One of the primary differences between the original *Eastern Pima County Trail System Master Plan* and this update is the addition of an important new feature: a system of what the trails community calls *trails parks*.

As a result of the experience of working to save the Fantasy Island Trails Park, parks planners learned that recreational trail users are seeking high-quality, recreational trail opportunities—preferably single-track trails—in a natural resource setting close to where they live or work. Fantasy Island has attracted visitors from as far away as New Hampshire, Vancouver, Canada, and even the United Kingdom. Trails parks are a key step between the urban pathways that many communities have and the trail systems in natural resource parks, which typically require more time and effort to access.

Trails parks can:

- Serve the recreational needs of a wide range of users.
- Create unique institutions that could be marketed as a reason to visit the community.
- Relieve recreational pressure on the existing large open space preserves located around the metropolitan area.
- Create an opportunity to brand and promote Pima County's trails.
- Create a quality of life element that can be marketed to potential corporate re-locators and large event and conventions.
- Add a valuable element to the region's protected green infrastructure.

The opportunity still exists in Tucson's rapidly-growing community to create trails parks around the fringe. The existing and proposed units described in this section of the Regional Trail System Master Plan represent an unparalleled opportunity to create a set of unique institutions that will impact quality of life and economic future for generations to come. Additional trails park development opportunities may be discovered as the units included in this plan are implemented.

### **36th Street Properties Trails Park (TP001)**

Immediately north of 36th Street, at the road's west end, are a series of privately-owned properties that Pima County has identified for possible addition to Tucson Mountain Park. These four foothill properties, which total almost 240 acres, are scenic and contain outstanding Sonoran





Desert habitat. However, they have been impacted over the years by four-wheel drive vehicles and all-terrain vehicles. Consistent with the 2008 Tucson Mountain Park Management Plan, which seeks to satisfy recreational demand on the periphery of the park while reducing human visitation into the park's sensitive core, Pima County proposes the development of a trails park on these 36th Street properties to help meet that goal. The proposed 36th Street trails park could be linked to the regional trail system by connecting it with property slated for donation to Pima County by El Paso Natural Gas, which is located on the eastern edge of the proposed trails park.

### **A7 Ranch (TP002)**

Pima County acquired the A7 Ranch from the City of Tucson in 2004 using 2004 Pima County Open Space Bond funding. The ranch, located in the eastern portion of the Reddington Pass area, consists of 6,828 acres of fee property and 30,000 acres of grazing leases over Arizona State Trust Land. The A7 Ranch is remote and scenic, and could offer recreational trail opportunities for hikers, mountain bikers, and equestrians. Like other ranches, the primary goal at A7 Ranch is to preserve open space, but trail connections can occur across the property.

### **Agua Caliente Park (TP003)**

A 20-acre parcel, immediately west of Houghton Road and bisected by Agua Caliente Creek, could become a small equestrian trails park. The park could be expanded to more than 30 acres if a wide portion of the Houghton Road right-of-way, which abuts the proposed trails park, is included in the footprint. Use of this property would be subject to the approval of the Pima County Regional Flood Control District.

### **Atturbury Trails Park (TP004)**

The City of Tucson owns more than 2,000 acres of property encompassing the Atturbury Wash within the eastern extent of Davis-Monthan AFB. This property contains a long, braided segment of the wash and a considerable amount of high quality desert habitat. More than 1,400 acres of the 2,000 have not been impacted by base operations and are in excellent natural condition. In the future, the property, which presently houses a shooting range, may no longer be needed for its current purpose. Should that time arrive, the property could be designated as a natural preserve and would make an ideal equestrian/hiking facility. It would complement the neighboring Fantasy Island, the primary users of which are mountain bikers.



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### **Canoa Ranch (TP005)**

Pima County's 5,000 acre Canoa Ranch property is both an open space preserve and an important historic site. The Ranch, which includes a number of historic structures which will eventually be restored, encompasses a five-mile long segment of the Juan Bautista de Anza National Historic Trail. The Canoa Ranch property offers additional opportunities for recreational trail development, particularly trails for equestrians, consistent with its adopted master plan. Like other ranches, the primary goal at Raul M. Grijalva Canoa Ranch is to preserve open space, but trail connections can occur across the property.



### **CAP Trails Park (TP006)**

Along the eastern side of the CAP canal are long stretches of protected federal property associated with the canal called "green-up areas." These green-up areas, which can be 1,000 feet in width, offer opportunities to develop additional recreational trails linked to the future CAP Trail, and can become stand-alone trails parks. Some of the green-up properties are located near existing residential neighborhoods and the new trails proposed for these properties could become recreational amenities for these nearby residents.

### **Catalina Regional Park (TP007)**

In the wake of flooding along Cañada del Oro Wash in the Catalina area, Pima County initiated a program of flood prone land acquisition that allowed the County to assemble enough land to create a park along the wash. This park will maintain a rural character and include recreational trails for equestrians, serving the large numbers of nearby horse properties.

### **Empirita Ranch (TP008)**

Pima County's 367-acre Empirita Ranch property is located immediately south of Interstate 10 near the Empirita Exit. It is the site of a historic ranch operation and has long been coveted by equestrians who would like the property to become an equestrian trails park and horse camp that could be used as a base for trail riding opportunities into the Empire-Cienega Resource Conservation Area and the Whetstone Mountains and for group rides and events. Creation of a "horse hotel," a facility where horse owners traveling cross-country with their animals could stay overnight, has also been proposed for the Empirita site. Local horse clubs have indicated an interest in adopting the property and becoming stewards of the site. Located immediately east of the property is more than 1,400 acres of BLM land, which provides additional opportunities



for equestrian trail development. Like other ranches, the primary goal at Empirita Ranch would be to preserve open space but trail connections could occur across the property.



## **Fantasy Island Trails Park (TP009)**

Fantasy Island Trails Park is the region's first trails park. A 348-acre tract of natural open space located on the southeast corner of Houghton and Irvington roads, this park is located on Arizona State Trust Land property. This unauthorized park, created by mountain bikers who had lost a nearby trail system to development, contains a popular 12-mile trail system. The trails community supported the designation of the site as recreational open space in the Houghton Area Master Plan, and for the State Land Department to include it in its conceptual development plan for the area, making conservation of the property possible. The trail system will need to be redesigned to enhance its sustainability because a number of alignments currently require constant maintenance.



## **Feliz Paseos Universal Access Park (TP010)**

Feliz Paseos is a 50-acre park which provides trail opportunities for wheelchair users in a beautiful open space setting with outstanding views. It features an accessible trail system with several loops to choose from, each with a different surface. The park has accessible interpretive exhibits and site amenities. Feliz Paseos is a model upon which additional parks will be designed.

## **Golf Links Trails Park (TP011)**

The proposed Golf Links trails park is a 100-acre parcel of surplus federal land located east of Alvernon and north of the Golf Links Road alignment in what used to be the northwest corner of Davis-Monthan AFB. The property is presently connected to the Regional Trail System by the segment of the Barraza/Aviation Bike Path that traverses the property. This surplus property has potential for the creation of a trails park for runners, walkers, and cyclists, and could be connected to midtown Tucson and Reid Park by the proposed Citation Greenway, and to the Julian Wash Greenway by the proposed Palo Verde Greenway.

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### **Greasewood Park (TP012)**

Tucson's 160-acre Greasewood Park is a natural open space park with several miles of walking trails. Some potential exists to create additional trails on the site, including trails for users with physical challenges, consistent with the park's master plan. The *Pima Regional Trails Master Plan* proposes to link Greasewood Park with Sentinel Peak Park by creating a new connector trail that crosses the Arizona Game and Fish Department's property, continues along the south side of Anklam Road, and then crosses the State Land property to connect with Sentinel Peak Park.



### **Green Valley West Desert Preserve Trails Park (TP013)**

Green Valley is a retirement community located south of Sahuarita. In 2006, a local group of activists initiated a proposal to create a large open space preserve on the western edge of Green Valley called the Green Valley West Desert Preserve. The property is composed of approximately 2,017 acres of State Trust Land and has several trails used by Green Valley mountain bikers, hikers, and walkers, with potential for the creation of additional trails, including trails for users with physical challenges. The proposal to have this property set aside in perpetuity has tremendous support in Green Valley, and is also supported by the adjacent Phelps Dodge Sierrita Mine, which would like to maintain the open space as a buffer between Green Valley and its mining operation. If not, alternatives methods to protect it will need to be found. The Pima County Conservation Acquisition Commission has put the West Desert Preserve on their list of community open space parcels eligible for future

### **"The Habitat" Park (TP014)**

This 20-acre parcel located at the southeast corner of 36th Street and Kino Boulevard is small compared to many of the proposed trails parks on this list, but the site will eventually provide a nice walking path with interpretive exhibits for use by adjacent neighborhoods and schools.

### **Habitat for Humanity Park (TP015)**

In the spring of 2008, Pima County acquired a 79-acre property located north of 36th Street and east of La Cholla that was formerly owned by Habitat for Humanity. The property, which contains a segment of a natural wash that flows out of the Tucson Mountains foothills, is part of an effort to re-establish a biological corridor between the Tucson Mountains and the Santa Cruz River. The property, which is composed entirely of natural open space, has trail development potential and



could become a quality-of-life feature for the adjacent neighborhoods. Pima County parks staff envision a three-mile loop trail for the park.

## **Indian Kitchen Trails Park (TP016)**

The proposed Indian Kitchen Trails Park is a 1,313-acre property located immediately west of the Mission Road/Helmet Peak Road intersection and is presently administered by the U.S. Bureau of Land Management. The property has been designated for disposal by BLM and is available to Pima County through the R&PP program. Pima County is exploring the possibility of dedicating this property, which is rich in cultural and natural resources, as a protected habitat site; however, if that designation does not come to pass, Indian Kitchen could become an outstanding trails park for equestrians and mountain bikers.

## **Julian Basin Trails Park (TP017)**

The proposed Julian Basin Trails Park is located adjacent to Julian Wash, east of Kolb Road.

## **Kinnison Wash Trails Park (TP018)**

An 80-acre parcel of Arizona State Trust Land straddles the Kinnison Wash just north and east of the intersection of Kolb and Irvington roads. This property, which also abuts Tucson's Groves Park, is connected to the Regional Trail System by the Kinnison Wash Greenway, which has connections in the immediate area to the Irvington Greenway, the proposed Kolb Road bike and pedestrian path, and the Atturbury Wash Greenway.

## **McKenzie Ranch (TP019)**

Pima County's 1,700-acre McKenzie Ranch property is located southeast of Tucson in the Rincon Mountains, about one-half mile north of Interstate 10 and 2000 feet east of the east end of Marsh Station Road. The property, which is exceptionally scenic and has superb views of the mountain ranges to the south of the Interstate 10 corridor, has trail development potential. The McKenzie Ranch property has been identified as a site for a much-needed mountain bike competition course as well as a recreational trails park for all non-motorized users. The McKenzie Ranch trails park will be connected to the Arizona Trail and the Cienega Creek Preserve via the proposed 11-mile Cochise Trail, which will also connect the property to Pima County's Walden Ranch property, approximately one and one-half miles southeast of the McKenzie property. Like other ranches, the primary goal at McKenzie



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Ranch would be to preserve open space but trail connections could occur across the property.

#### **Marana Tortolita Preserve (TP020)**

In 2002, the Town of Marana acquired approximately 2,400 acres of State Trust Land north of Tangerine Road and created the Marana Tortolita Preserve. The Preserve, immediately west of the Dove Mountain development, is composed of high-quality natural Sonoran desert, and is part of the alluvial fan of the Tortolita Mountains. The Preserve has an existing trail system and, because of its soft soil conditions, is better suited to equestrians and hikers than mountain bikers. However, the Preserve's trails are open to all non-motorized users. The Preserve is connected to the Regional Trail System through the Wild Burro Wash corridor, which provides a link to Tortolita Mountain Park and the CAP Trail's Tangerine trailhead.

#### **Mullins Landfill (TP021)**

The Mullins Landfill, located adjacent to Udall Park and the Pantano River Park, has the potential to become a trails park. This large property could be sculpted into a site with varying terrain and replanted with native desert vegetation, creating a trails park that could be used by hikers, runners, mountain bikers, and equestrians.

#### **Rancho Seco (TP022)**

Rancho Seco is located in Alter Valley. The property consists of 9,700 acres of fee property owned by Pima County and 12,000 acres of grazing leases over Arizona State Trust and BLM lands. On the western boundary of the property are a stretch of Sopori Wash and a portion of the border with the Buenos Aires National Wildlife Refuge. Like other ranches, the primary goal at Rancho Seco is to preserve open space but trail connections can occur across the property.

#### **Rincon Valley Trails Park (TP023)**

The Rincon Valley Trails Park is a proposed trails park opportunity in the Colossal Cave Mountain Park area. The site is adjacent to the X9 Ranch Road, one and one-half mile north of Old Spanish Trail.

#### **Rita Ranch Flood Control Basin Trails Park (TP024)**

The City of Tucson owns a 48-acre flood control basin located immediately west of the Rita Ranch subdivision that could become a small trails park. The property is connected with the Rita Ranch neighborhood by the wash corridors that drain into the basin. These washes have flat banks at least 20 feet in width that could accommodate recreational trails.





The basin could also be linked to the Julian Wash Greenway on the University of Arizona Science and Technology Park by creating a small connector trail between the basin and the greenway. An accessible loop trail could be developed around the perimeter of the park to provide opportunities for users with physical challenges.

## **Robles Pass Trails Park (TP025)**

The 1,000-acre Robles Pass property is located between Ajo Highway and Irvington Road, approximately one mile west of Mission Road. The property is considered a part of Tucson Mountain Park. Consistent with Pima County's intent to protect the core of Tucson Mountain Park by satisfying recreational demand on the edges of the park, the Robles Pass trails park will feature a ten- to twelve-mile trail system for hikers, equestrians, and mountain bikers. The lot will have space for more than 50 cars and a large equestrian staging area. There is a large dual-chambered ecoduct proposed under the Ajo Highway to help wildlife move safely between the trails park and Tucson Mountain Park proper, and also to connect the trail systems on both properties. A management plan for the Robles Pass Trails Park has been prepared and approved and the park is presently under development. Completion of the trail system and ecoduct are expected by the end of 2009.

## **Rodeo Wash Trails Park (TP026)**

The proposed Rodeo Wash Trails Park is located at the southeast corner of Valencia Road and Alvernon Way. It is located along the Rodeo Wash Greenway.

## **Sentinel Peak Park (TP027)**

Tucson's Sentinel Peak Park, home of 'A' Mountain, is situated west of downtown and is a 290-acre natural resource park. The property is home to one trail and has room for the development of additional trails. This park could be linked to Greasewood Park as described above.

## **Silverbell Road Trails Park (TP028)**

The Silverbell Road Trails Park site is located south of Sunset Road, west of the Silverbell Road Path and the Santa Cruz River Park.

## **Sweetwater Preserve (TP029)**

The 700-acre Sweetwater Preserve property was acquired in 2005 using funding from the 2004 Pima County Open Space Bond Program. Because the funding for the acquisition was drawn from the Community Open Space category of the Open Space Bond, the Sweetwater property is intended to provide a wide range of benefits to the community,



including recreational trails for hikers, equestrians, and mountain bikers. A management plan was prepared for the Sweetwater Preserve in 2007, and the Park's 10.4-mile long trail system was constructed in 2007-2008 by the Pima County Natural Resources, Parks, and Recreation Department. The trail system is already being used by residents and visitors, and is rapidly becoming one of the most popular recreational trail systems in the Pima County area.



#### **Valencia Trust Land Trails Park (TP030)**

The Arizona State Land Department controls 400 acres of property north of Valencia Road that could become a natural resource trails park. The property, located immediately north of the Rita Ranch neighborhood, is within the noise contour for Davis-Monthan Air Force Base and can't be used for residential development. The property is relatively flat with outstanding views in all directions and well-suited for trails.

#### **Walden Ranch (TP031)**

Like the McKenzie Ranch property, Pima County's 480-acre Walden Ranch is located southeast of the Tucson metropolitan area in the foothills of the Rincon Mountains, north of Interstate 10. The property is about one and one-half miles southeast of McKenzie Ranch, immediately south of the existing Union Pacific rail line. The property features rolling hills and excellent views to the south and east. A trails park system could be developed on the property. Like other ranches, the primary goal at Walden Ranch would be to preserve open space but trail connections could occur across the property.

#### **West Lambert Lane Trails Park (TP032)**

The West Lambert Lane Trails Park is an existing park located on the north side of Lambert Lane between La Cañada Drive and La Cholla Boulevard. It features a two loop trail system with views of Pusch Ridge and the Catalina Mountains.

#### **Other Possible Trails Parks Sites**

**Flood Control Basins.** A number of flood control basins exist around the Tucson metropolitan area that could be integrated into the Regional Trail System through the development of pathways that could circle these basins. Examples include the Rodeo Wash basin south of Valencia and east of Alvernon, and the existing basin east of Kolb at the Julian Wash, both of which are controlled by Pima County. These and other basins should be considered as possible trails parks or trail system



elements capable of serving adjacent neighborhoods and regional system users.

**Closed Landfills.** Closed landfills offer the potential for the development of recreational trails parks. One example is the closed Mullins Landfill, mentioned previously. Several other landfills to consider exist along the Pantano corridor and elsewhere.

**Borrow Pits.** Borrow pits are among the hardest kinds of all “drosscapes” to adapt for other uses. A number of borrow pits exist around the metropolitan area—including the pits along the Santa Cruz River between Orange Grove and Sunset roads—that could be used in the future as trails parks. These and other borrow pits should be given consideration as plans are prepared for their re-use.

**Tucson Water Properties.** Tucson Water has acquired a large amount of property in recent years for their water rights, including more than 30,000 acres in Avra Valley. Some of these properties—particularly the ones previously impacted by agricultural uses—could be sites for equestrian trails parks.

**City of Tucson Open Space Properties.** A number of properties around the metropolitan area are elements of the City of Tucson’s real estate portfolio and have been designated for retention as natural open space. These properties include a pair of parcels totaling 138.3 acres along the west side of Silverbell Road, south of the Sweetwater Drive alignment. A ridgeline trail could be developed on these properties for the benefit of area neighbors, and could be linked to the Silverbell/Columbus Park across the street.

**Other surplus public properties.** Any other suitable property owned by local, state, or federal government agencies that is considered surplus or could somehow be acquired at reasonable cost should be evaluated for addition to the trails park system, particularly properties adjacent to river parks or greenway corridors, or other elements of the regional trail system.



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### ***Trailheads, Entry Nodes, and Boundary Access Points***

Assuring safe, secure, and orderly access to the trail systems located on the local, state, and federal open space preserves that surround the Tucson metropolitan area was one of the driving forces behind the original *Eastern Pima County Trail System Master Plan*. The regional partners have been committed to securing public access to these lands for more than twenty years with considerable success. Access is a critical element of the regional trails program; without it, many of the community's outstanding trails would not be accessible to residents and visitors. The Regional Trail System Master Plan base map identifies the major existing and proposed trailheads, entry nodes, and access points around and in the Tucson basin.

Trailheads, all sizes and types, are listed below and given the designation of TH or THE, the latter being a trailhead with equestrian facilities. The TH or THE is followed by (S) or (L) for small or large. Refer to the standards section for descriptions on what the expectations are for a small or large facility. The reader should bear in mind that Trails Parks, listed in the previous section, are also considered trailheads because they have trailhead facilities and offer access to trails but are not listed again in this section. Entry nodes are not designated or identified specifically in this section. They are described in concept in the Standards section and should occur wherever possible. Boundary Access Points are listed with Trailheads but are given the designation of BAP and a separate numbering system.



#### **Cañada del Oro**

##### **La Cañada/Rancho Feliz Trailhead (TH[S]001)**

Potential small trailhead located on south bank of the Cañada del Oro, just west of La Cañada Drive, along Rancho Feliz Drive.

##### **Overton Arts Center Trailhead (TH[S]002)**

Potential small trailhead. The site is currently owned by Pima County

##### **Pusch View Lane Trailhead (TH[S]003)**

Potential small trailhead location on the south side of Cañada del Oro at Pusch View Lane.

##### **Riverfront Park Trailhead (THE[S]004)**

Existing small equestrian trailhead location is on the north side of Cañada del Oro near Corbett Lane. The trailhead includes a ramada and water.



## **Thornydale Trailhead (TH[L]005)**

Potential trailhead location is on the north side of Cañada del Oro, which can be incorporated into future commercial developments.

## **YMCA Trailhead (TH[S]006)**

Trailhead parking to access the Cañada del Oro River park west of Shannon is located at the YMCA facility, which is at the southeast corner of Shannon and McGee.

## **Central Arizona Project Canal**

### **Avra Valley Road Trailhead (THE[L]007)**

A large staging area for the CAP Trail has been proposed for the Marana Bureau of Reclamation Regional Park site, approximately 2,800 feet east of the CAP canal and immediately south of Avra Valley Road. The trailhead will be integrated into Marana's master plan for the Bureau of Reclamation Park.

### **Tangerine Trailhead (THE[L]008)**

A trailhead serving the CAP Trail has been proposed for the area immediately east of the CAP canal and approximately 1,900 feet north of Tangerine Road. The proposed trailhead will serve hikers, mountain bikers, and equestrians. In addition to providing access to the CAP Trail, the Tangerine Trailhead will also connect to the west end of Wild Burro Wash Trail, providing access to the Wild Burro Trail, Marana's Tortolita Preserve, and Tortolita Mountain Park.

## **Cerro Colorados**

### **Cerro Colorado Boundary Access Point (BAP001)**

Access point to proposed Cerro Colorado Mountain Park from the south along Cerro Colorado South Access Road Backcountry Trail.

### **Cerro Colorado Boundary Access Point (BAP002)**

Access point to proposed Cerro Colorado Mountain Park from the east along Proctor Wash/Bob Brown Lateral Backcountry Trail.

## **Cienega Creek Natural Preserve**

### **Agua Verde Link North Boundary Access Point (BAP003)**

Access point to Cienega Creek Natural Preserve on Pantano Wash Trail, north of Interstate 10.



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**Agua Verde Link South 1 Boundary Access Point (BAP004)**

Access point to Cienega Creek Natural Preserve on Agua Verde Link Trail, near Interstate 10.

**Agua Verde Link South 2 Boundary Access Point (BAP005)**

Access point to Cienega Creek Natural Preserve on Agua Verde Link Trail in Section 7, south and east of the BAP004.

**Agua Verde Link South 3 Boundary Access Point (BAP006)**

Access point to Cienega Creek Natural Preserve on Agua Verde Link Trail in Section 17 at the south end of the Preserve parcel.

**Colossal Cave Road Trailhead (THE[S]009)**

An undeveloped dirt parking area south of Colossal Cave Road at the north end of the Cienega Creek Preserve, this trailhead has room for approximately ten cars and two horse rigs and provides access to the Preserve. A paved lot is planned. Note, a permit is required to access the Preserve.

**Gas Pipeline Boundary Access Point (BAP007)**

Access point to Cienega Creek Natural Preserve from the west along the Gas Pipeline Backcountry Trail, about one-half mile south of Interstate 10.

**Gas/Power Middle Boundary Access Point (BAP008)**

Access point to Cienega Creek Natural Preserve from the south along the Gas/power Middle Backcountry Trail, just north of Interstate 10.

**Total Wreck Wash Boundary Access Point (BAP009)**

Access point to Cienega Creek Natural Preserve where Total Wreck Wash enters the Preserve on the south side.

**Colossal Cave Mountain Park****Camino Loma Alta Loop West 1 (BAP010)**

Access to Colossal Cave Mountain Park from the west along Camino Loma Alta Greenway.

**Camino Loma Alta Loop West 2 Boundary Access Point (BAP011)**

Access to Colossal Cave Mountain Park from the west along Camino Loma Alta Greenway.





## **Camino Loma Alta Loop West 3 Boundary Access Point (BAP012)**

Access to Colossal Cave Mountain Park from the west along Camino Loma Alta Greenway.

## **Cienega West Trailhead (TH[S]010)**

The Cienega West Trailhead is a small trailhead on the south side of Marsh Station Road, about a half-mile south of Pantano Wash. It provides access to Cienega Creek Natural Preserve.

## **Colossal Cave North Trailhead (TH[S]011)**

The Colossal Cave North Trailhead will be located immediately east of Old Spanish Trail just outside the front gate of Colossal Cave Mountain Park, and will provide access to the Old Spanish Trail Bicycle and Pedestrian Path, as well as to trails within the park.

## **Colossal Cave South Trailhead (TH[S]012)**

The Colossal Cave South Trailhead will be located immediately south of Colossal Cave Road just outside of Colossal Cave Mountain Park's south gate. The trailhead will provide access to the Arizona Trail within Colossal Cave Mountain Park.

## **Coyote Wash Boundary Access Point (BAP013)**

Access to Colossal Cave Mountain Park from the north, along Coyote Wash, one and three-quarter miles east of Camino Loma Alta Greenway.

## **Lower Agua Verde Creek Boundary Access Point (BAP014)**

Access point to Colossal Cave Mountain Park from the south along Lower Agua Verde Creek, about two-thirds of a mile west of Agua Verde Road.

## **Posta Quemada Ranch Trailhead (THE[S]013)**

The Posta Quemada Ranch's main paved parking lot doubles as a trailhead staging area for the Arizona Trail within Colossal Cave Mountain Park. The trailhead is accessible during park hours through the Park's main gate on Old Spanish Trail, and is available for use by hikers, mountain bikers, and equestrians.

## **Power Line Boundary Access Point (BAP015)**

Access point to Colossal Cave Mountain Park from the east along Power Line Backcountry Trail.



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## **Coronado National Forest - Catalina Ranger District**

### **Agua Caliente Hill South Trailhead (THE[S]014)**

This trailhead is a 16-car, 4-horse rig paved parking lot at the end of Camino Cantil within the Palo Verde Estates subdivision, located at the east end of Fort Lowell Road. The trailhead, located on Forest property, provides access to the Coronado National Forest's Agua Caliente trail system.



### **Agua Caliente Park Trailhead (TH[S]015)**

The public parking lot on the park's east end doubles as a staging area for access to the Agua Caliente area of the Coronado National Forest for hikers and mountain bikers. Equestrians stage at the nearby Agua Caliente Hill South Trailhead—see above. Forest access from the end of adjacent Roger Road is under negotiation.

### **Agua Verde Link Boundary Access Point (BAP016)**

Access point to Coronado National Forest from the south, just east of Agua Verde Road.

### **Agua Verde North Fork Boundary Access Point (BAP017)**

Access point to Coronado National Forest, from the south, five miles east of Agua Verde Road.

### **Arrowhead Boundary Access Point (BAP018)**

Access point to Coronado National Forest two miles east of Agua Verde Road.

### **Avenida de Suzenu Trailhead (THE[S]016)**

This staging area is actually side-of-the-road parking at the north end of Avenida de Suzenu, a residential dirt road in the far northeast corner of the Tucson Basin. Hikers and equestrians must pass through a gate and walk east down a private section of Horsehead Road to get to the Forest boundary. This route provides access to the Agua Caliente region of the Forest and its trail system, as well as scenic Agua Caliente and Milagrosa canyons; however, it is presently the subject of an access challenge.

### **Bear Canyon Trailhead (THE[S]017)**

A primitive dirt parking area located along the Bear Canyon Road right-of-way near its northern end, the Bear Canyon Trailhead presently has room for about ten vehicles. Trail users can follow the undeveloped County dirt road north a short distance to access to the Bear Canyon region of the Coronado National Forest and the Bear Canyon Trail.



Bicyclists are not permitted beyond the end of the road where the trail enters a federally-designated wilderness area.

## **Buehman Canyon South Boundary Access Point (BAP019)**

Access point to Coronado National Forest from the east where Buehman Canyon Backcountry Trail ends at the boundary.

## **Campbell Trailhead (TH[S]018)**

A small paved parking area maintained by Pima County at the north end of Campbell Boulevard, the Campbell Trailhead connects to a fenced corridor that provides general access to the Coronado National Forest, but not to a designated trail.

## **Canyon del Salto Boundary Access Point Boundary Access Point (BAP020)**

Access point to Coronado National Forest from the west, eight-tenths mile north of Redington Road.

## **Canyon Vista Road Boundary Access Point (BAP021)**

Access point to Coronado National Forest from the west along Chalk Mine Road /Edwin Road Backcountry Trail.

## **Davidson Canyon Boundary Access Point (BAP022)**

Access point to Coronado National Forest where the southern branch of the Davidson Canyon Backcountry Trail ends at the boundary, near where Sonoita Highway enters the park.

## **Distillery Canyon Boundary Access Point (BAP023)**

Access point to Coronado National Forest three and one-half miles east of Agua Verde Road, near Red Hill Ranch Road.

## **Edgar Canyon Boundary Access Point (BAP024)**

Access point to Coronado National Forest from the east where Edgar Canyon Backcountry Trail ends at the boundary.

## **Elephant Head Boundary Access Point (BAP025)**

Access point to Coronado National Forest south and east of Sahuarita where the Elephant Head/Hawk Way Backcountry Trail ends at the boundary.

## **Esperero Wash North Boundary Access Point (BAP26)**

Access point to Coronado National Forest where Esperero Wash north branch ends at the boundary.

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**Esperero Wash South Boundary Access Point (BAP027)**

Access point to Coronado National Forest where Esperero Wash south branch ends at the boundary.

**Flat Rock Boundary Access Point (BAP028)**

Access point to Coronado National Forest from the west along Catalina Park/Flat Rock Backcountry Trail.

**Forty-niners Wash Boundary Access Point (BAP029)**

Access point to Coronado National Forest where Forth-niners Wash ends at the boundary, near Scout Rest Road.

**Finger Rock Trailhead (TH[L]019)**

A 31-vehicle lot at the north end of Alvernon Way provides access to the Finger Rock, Pontatoc Ridge, and Pontatoc Canyon trails in the Coronado National Forest.

**Harrison Road Boundary Access Point (BAP030)**

Access point to Coronado National Forest where Harrison Road ends at the forest boundary.

**Hidden Springs Boundary Access Point (BAP031)**

Access point to Coronado National Forest two and one-quarter miles east of Agua Verde Road.

**Houghton Road North Boundary Access Point (BAP032)**

Access point to Coronado National Forest where Houghton Road ends at the forest boundary.

**Houghton Road South Boundary Access Point (BAP033)**

Access point to Coronado National Forest where the Houghton Road Backcountry Trail ends at the forest boundary.

**Iris Dewhirst Pima Canyon Trailhead (TH[L]020)**

This 50-vehicle lot, located at the east end of Magee Road, provides access to the Pima Canyon Trail in the Coronado National Forest, one of the most popular and scenic in southern Arizona. The parking lot and first 1,700 feet of the trail are owned and maintained by Pima County.

**Linda Vista Trailhead (TH[S]021)**

A small paved lot with room for six cars is located just off east Linda Vista Road near the boundary of the Coronado National Forest, and provides access to the Forest's Linda Vista Trail. Horse staging is not available here, but equestrians are welcome on the trail, which leads



into the Pusch Ridge Wilderness area. The trailhead is managed by the Town of Oro Valley.

**Little Cottonwood Wash Boundary Access Point (BAP034)**

Access point to Coronado National Forest where Little Cottonwood Wash ends at the boundary.

**Madera Canyon Wash Boundary Access Point (BAP035)**

Access point to Coronado National Forest where Madera Canyon Wash Backcountry Trail ends at the boundary.

**Middle Gate Boundary Access Point (BAP036)**

Access point to Coronado National Forest from the west along the southern spur of the Catalina Park/Flat Rock Backcountry Trail.

**Mulberry Boundary Access Point (BAP037)**

Access point to Coronado National Forest where the northern branch of the Davidson Canyon Backcountry Trail ends at the boundary, about one-half mile north of BAP022.

**Papago Springs Boundary Access Point (BAP038)**

Access point to Coronado National Forest where Papago Springs Road Backcountry Trail ends at the forest boundary.

**Pelon Springs Boundary Access Point (BAP039)**

Access point to Coronado National Forest where Soza/Canada Atravesada Backcountry Trail ends at the forest boundary.

**Posta Quemada Boundary Access Point (BAP040)**

Access point to Coronado National Forest where Posta Quemada Backcountry Trail ends at the forest boundary, near Via Rancho del Cielo.

**Sabino Canyon Recreation Area Trailhead (TH[L]022)**

The parking lot of the Sabino Canyon Recreation Area provides an excellent staging point for many popular hiking trails in the front range of the Catalina Mountains, including Blackett's Ridge Trail, Esperero Trail, Seven Falls Trail, Phone Line Trail, Bear Canyon Trail, and the Sabino Canyon Trail—all of which provide access to the Forest's backcountry trail system. The lot is large but fills quickly on weekends and holidays.

**Soza Canyon/Espiritu Canyon Boundary Access Point (BAP041)**

Access point to Coronado National Forest where Soza/Espiritu Canyon Backcountry Trail ends at the forest boundary.

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**Tanque Verde Creek Boundary Access Point (BAP042)**

Access point to Coronado National Forest where Tanque Verde Wash Backcountry Trail ends at the forest boundary.

**Valley View Wash Boundary Access Point (BAP043)**

Access point to Coronado National Forest where Valley View Wash Backcountry Trail ends at the forest boundary, north of Finisterra.

**Ventana Canyon Trailhead (TH[S]023)**

The Ventana Trailhead is located at the north end of the Ventana Canyon Resort's employee parking area, and has space for 25 cars. A 5,200-foot-long County-controlled access trail, most of which follows the Ventana Wash, connects the trailhead with the Forest.

**Wakefield Canyon Boundary Access Point (BAP044)**

Access point to Coronado National Forest where the Wakefield Canyon Backcountry Trail ends at the forest boundary.

**Whetstone Boundary Access Point (BAP045)**

Access point to Coronado National Forest where the Whetstone Backcountry Trail ends at the forest boundary.

**Davidson Canyon****Davidson Loop Boundary Access Point (BAP046)**

Access point to Davidson Canyon on the Davidson Loop Backcountry Trail at the southwest border of the preserve.

**Gas Pipeline East Boundary Access Point (BAP047)**

Access point to Davidson Canyon on the Gas Pipeline Backcountry Trail at the northeast border of the preserve.

**Gas Pipeline West Boundary Access Point (BAP048)**

Access point to Davidson Canyon on the Gas Pipeline Backcountry Trail at the northwest border of the preserve.

**Gas/Power Middle Boundary Access Point (BAP049)**

Access point to Davidson Canyon on the Gas/Power Middle Backcountry Trail at the east border of the preserve.

**Power Line Boundary Access Point (BAP050)**

Access point to Davidson Canyon on the Power Line Backcountry Trail at the east border of the preserve.





## **Total Wreck Wash Local Boundary Access Point (BAP051)**

Access point to Davidson Canyon on the Gas/Power Middle Backcountry Trail at the east border of the preserve.

## **Diamond Bell Ranch**

### **Fresnal Wash Boundary Access Point (BAP052)**

Access point to Diamond Bell Ranch where Fresnal Wash Backcountry Trail ends at the east boundary.

## **Empire Mountain Park**

### **Total Wreck Wash Boundary Access Point (BAP053)**

Access point to the proposed Empire Mountain Park where Total Wreck Wash Backcountry Trail ends at the north boundary.

## **Houghton Road Greenway**

### **Bonanza Trailhead (THE[L]024)**

Potential large trailhead location west of Houghton Road, near Bonanza Avenue, and south of Pantano River Park.

### **Danforth Trailhead (TH[S]025)**

Potential small trailhead location east of Houghton Road and south of Golf Links Road.

### **Julian Wash Trailhead (THE[S]026)**

Potential small trailhead location west of Houghton Road and north of Julian Wash.

### **Old Spanish Trail Trailhead (THE[S]027)**

Potential small trailhead location at the southeast corner of Houghton Road and Old Spanish Trail.

### **Pantano Wash Trailhead (THE[L]028)**

Potential large trailhead location west of Houghton Road and north of Irvington Road Greenway.

### **Sahuarita Road Trailhead (TH[S]029)**

Potential small trailhead location at the intersection of Houghton Road and Sahuarita Greenway.

### **South Houghton Road Trailhead (THE[L]030)**

Potential large trailhead location at the south end of Houghton Road, south of Camino Aurelia.



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## Jeremy Wash

### Jeremy Wash Trailhead (THE[S]031)

The Jeremy Wash Trailhead will be constructed on Rocking K Ranch property immediately east of Old Spanish Trail, adjacent to the northern edge of Jeremy Wash. The trailhead is a requirement of the Rocking K Ranch Specific Plan, and will be built by Rocking K Development Corp. to Pima County specifications. The facility will provide access to the Hope Camp Trail, a long corridor that crosses the northern portion of the Rocking K Ranch and into the Saguaro National Park East Expansion area, connecting the Rincon Creek with the Arizona Trail.



## Julian Wash

### 12th Avenue Trailhead (TH[S]032)

This small park provides six paved parking spaces that serve the trail corridor, a playground, shade/picnic ramada, and restroom. It is located on the west side of 12th Avenue, north of 40th Street, and just south of the Interstate 10/Interstate 19 split.

### Kolb Road Trailhead (TH[S]033)

Potential small trailhead location southeast of Kolb Road and Julian Wash Greenway.

### Wilmot Road Trailhead (THE[S]034)

Potential small trailhead location east of Wilmot Road and north of Julian Wash Greenway.

## Las Cienegas Natural Conservation Area

### The Narrows Boundary Access Point (BAP054)

Access point to Las Cienegas Natural Conservation Area where Agua Verde Link Backcountry Trail ends at the north boundary.

## McKenzie Ranch

### Cochise Trail East 2 Boundary Access Point (BAP055)

Access point to McKenzie Ranch on the east side where the Cochise Backcountry Trail ends at the boundary.

### Cochise Trail West 1 Boundary Access Point (BAP056)

Access point to McKenzie Ranch on the west side where the Cochise Backcountry Trail ends at the boundary.



## Pantano Wash

### 22nd Street and Pantano Road Trailhead (TH[L]035)

Potential large trailhead location at the intersection of 22nd Street and Pantano River Park.

### Craycroft Road Trailhead (THE[S]036)

Approximately 15 unimproved and unpaved parking spaces are available. No other amenities are provided. This trailhead also provides access to the Pantano Wash corridor

### Golf Links Road Trailhead (TH[S]037)

Potential small trailhead location south of Golf Links Road and east of Pantano River Park.

### Home Depot on Broadway Boulevard Trailhead (TH[S]038)

Potential small trailhead location at the Home Depot center north of Broadway Boulevard and east of Pantano River Park.

## Pistol Hill

### Pistol Hill Road Trailhead (THE[S]039)

A new trailhead to serve Arizona Trail users has been proposed for just east of Pistol Hill Road, approximately one and seven-tenth miles north of Old Spanish Trail. The trailhead would serve hikers, mountain bikers, and equestrians, and would be located in immediate proximity to the Arizona Trail.

### Pistol Hill Loop Trailhead (THE[S]040)

A new trailhead facility is proposed for the southeast corner of Pistol Hill Road and Old Spanish Trail to serve the proposed Pistol Hill Loop Trail. The exact location and specific features of the lot have yet to be determined.

## Rillito River

### Brandi Fenton Memorial Park Trailhead (THE[L]041)

This park, north of Rillito River and west of Dodge Boulevard, provides vehicular parking and other amenities for equestrian and trail users.

### Camino de la Tierra Trailhead (TH[S]042)

Potential small trailhead location on Camino de la Tierra, south of Rillito River Park.



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**Campbell Avenue Trailhead (TH[S]043)**

Paved parking spaces are available on the southeast corner of Campbell and the Rillito River.

**CarMax Trailhead (TH[S]044)**

Potential small trailhead location at River Road and Rillito River Park, on the Romero Road alignment.

**Children's Memorial Park Trailhead (THE[L]045)**

Approximately 44 paved parking spaces and unpaved roadside shoulders. Restroom, picnic/shade ramadas, playground, and other amenities north of the Rillito River at 15th Drive.

**River Fringe Drive Trailhead (TH[L]046)**

Approximately 43 paved parking spaces, restrooms, and amenities on the north side of the river, south of River Road are available.

**Swan Road Trailhead (THE[S]047)**

Approximately ten unpaved horse rig spaces are available at this location on the southeast corner of Swan and the Rillito River. However, the spaces are not for exclusive use of equestrians. Amenities include a shade ramada.

**Saguaro National Park - Rincon District****Broadway Gate Trailhead (THE[L]048)**

The Broadway Gate is the access point to Saguaro National Park's Cactus Forest Trail system from the east end of Broadway Boulevard. Trail users must park along the road at present, but a new trailhead is planned. Capacity currently exists for about 12 cars.

**Camino Loma Alta Trailhead (THE[S]049)**

A temporary parking area has been established by Saguaro National Park at the northern end of Camino Loma Alta to provide access to the park's 3,500-acre expansion area and its informal trail system. Unpaved parking is available for about ten cars. An improved lot is planned as a part of the park's revised General Management Plan.

**Coyote Wash Boundary Access Point (BAP057)**

Access point to Saguaro National Park where Coyote Wash Backcountry Trail enters the park east of Camino Loma Alta Greenway.



## **Douglas Spring Trailhead (TH[S]050)**

This small parking lot at the east end of Speedway Boulevard has room for 16 vehicles and provides access to the Cactus Forest Trail system and the popular Douglas Spring Trail in Saguaro National Park East. The lot is for hikers only; equestrian staging is located alongside Speedway Boulevard a short distance to the west at the Wildhorse Gate.

## **Hope Camp Boundary Access Point (BAP058)**

Access point to Saguaro National Park from the south where the Hope Camp Backcountry Trail ends at the boundary.

## **Monument Boundary Boundary Access Point (BAP059)**

Access point to Saguaro National Park from the west where the Monument Boundary Backcountry Trail ends at the park boundary.

## **Old Spanish Trail Trailhead (TH[S]051)**

Old Spanish Trail Trailhead is at the intersection of Old Spanish Trail Path and the Shurban Loop Backcountry Trail and provides access to Saguaro national Monument East.

## **Phoneline Link Boundary Access Point (BAP060)**

Access point to Saguaro National Park from the south where the Phoneline Link Backcountry Trail ends at the boundary.

## **Rincon Creek East Boundary Access Point (BAP061)**

Access point to Saguaro National Park from the west where the Rincon Creek Backcountry Trail ends at the boundary.

## **Rincon Creek West Boundary Access Point (BAP062)**

Access point to Saguaro National Park from the south where the Rincon Creek Backcountry Trail ends at the boundary.

## **Rincon Creek South Fork Boundary Access Point (BAP063)**

Access point to Saguaro National Park from the west where the Rincon Creek South Fork Backcountry Trail ends at the boundary.

## **Saguaro National Park Boundary Access Point (BAP064)**

Access point to Saguaro National Park from the west near where the Old Spanish Trail Path follows the park boundary's west border, north of Escalante Road.



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**Wentworth Road Boundary Access Point (BAP065)**

Access point to Saguaro National Park from the west along the Wentworth Road alignment, south of Speedway Boulevard.

**X-9 Ranch Road Boundary Access Point (BAP066)**

Access point to Saguaro National Park from the south where the X-9 Ranch Road Backcountry Trail ends at the boundary.

**Saguaro National Park - Tucson Mountain Unit****Abington Road Boundary Access Point (BAP067)**

Access point to Saguaro National Park on the east side where Belmont Loop Backcountry Trail enters the park, near Abington Road.

**Belmont Loop Boundary Access Point (BAP068)**

Access point to Saguaro National Park where Belmont Loop Backcountry Trail enters the park near the Orange Grove Road alignment.

**Belmont Road Boundary Access Point (BAP069)**

Access point to Saguaro National Park on the east side where Belmont Road Backcountry Trail enters the park.

**El Camino del Cerro Trailhead (THE[S]052)**

This ten-car, two-horse rig paved trailhead is located at the west end of El Camino del Cerro and provides access to the popular Sweetwater Trail and other trails in Saguaro National Park West. A narrow right-of-way based site (just 60 feet in width) limits the size and capacity of this lot.

**King Canyon Trailhead (THE[S]053)**

This primitive dirt lot across Kinney Road from the Arizona–Sonoran Desert Museum is located within Tucson Mountain Park but serves the King Canyon Trail in Saguaro National Park West, as well as Tucson Mountain Park's planned Cougar Trail. Space exists for approximately 15 cars and can at present only accommodate one horse rig. The lot is in a less-than-ideal location and will be replaced with a new trailhead approximately one-quarter mile to the west when funding can be secured.

**Fort Lowell Road Boundary Access Point (BAP070)**

Access point to Saguaro National Park on the west side where Fort Lowell Road Backcountry Trail ends at the park boundary.





## **Manville Road Boundary Access Point (BAP071)**

Access point to Saguaro National Park at the east end of Manville Road.

## **Picture Rocks Trailhead (TH[S]054)**

Picture Rocks Trailhead is at the point where Picture Rocks Road enters Saguaro National Monument West and the terminus of Picture Rocks Road Backcountry Trail.

## **Picture Rock Wash North Boundary Access Point (BAP072)**

Access point to Saguaro National Park where Picture Rock Wash Backcountry Trail enters the park.

## **Picture Rock Wash South 1 Boundary Access Point (BAP073)**

Access point to Saguaro National Park where Picture Rock Wash Backcountry Trail enters the park.

## **Picture Rock Wash South 2 Boundary Access Point (BAP074)**

Access point to Saguaro National Park where Picture Rock Wash Backcountry Trail enters the park.

## **Roger Wash Middle 1 Boundary Access Point (BAP075)**

Access point to Saguaro National Park where Roger Wash/Roger Extension Backcountry trail enters the park from the east, near the Bucking Bronco Place alignment.

## **Roger Wash Middle 2 Boundary Access Point (BAP076)**

Access point to Saguaro National Park where Roger Wash/Roger Extension Backcountry trail enters the park from the east, near Banded Gecko Way.

## **Roger Wash Middle 3 Boundary Access Point (BAP077)**

Access point to Saguaro National Park where Roger Wash/Roger Extension Backcountry trail enters the park from the east, south of Sweetwater Drive.

## **Roger Wash North Boundary Access Point (BAP078)**

Access point to Saguaro National Park where Roger Wash/Roger Extension Backcountry trail enters the park from the east, south of El Camino del Cerro.



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**Roger Wash South Boundary Access Point (BAP079)**

Access point to Saguaro National Park where Roger Wash/Roger Extension Backcountry trail enters the park from the east, near Chaos Canyon Lane.

**Scenic Drive Boundary Access Point (BAP080)**

Access point to Tucson Mountain Park where Scenic Drive Backcountry Trail enters the park from the north.

**South Sweetwater Boundary Access Point (BAP081)**

Access point to Saguaro National Park where South Sweetwater Backcountry trail enters the park from the east.

**Sweetwater Road Trail Boundary Access Point (BAP082)**

Access point to Saguaro National Park where Sweetwater Road Backcountry trail enters the park from the east.

**Wild Horse Wash South 1 Boundary Access Point (BAP083)**

Access point to Saguaro National Park where Wild Horse Wash Backcountry Trail enters the park, near the Diamond Street alignment.

**Wild Horse Wash South 2 Boundary Access Point (BAP084)**

Access point to Saguaro National Park where Wild Horse Wash Backcountry Trail enters the park, near the Sunset Road alignment.

**Wild Horse Wash South 3 Boundary Access Point (BAP085)**

Access point to Saguaro National Park where Wild Horse Wash Backcountry Trail enters the park, near the Gerhart Road alignment.

**Yuma Mine Trail Boundary Access Point (BAP086)**

Access point to Saguaro National Park where Wild Horse Wash Backcountry Trail enters the park, near the Yuma Mine Trail alignment.

**Sahuarita Greenway****Sahuarita Road Trailhead (THE[L]055)**

A large trailhead has been proposed for the corner of Highway 83 and Sahuarita Road to serve users of the proposed Sahuarita Greenway and the Arizona Trail. The exact location of the trailhead has yet to be determined.



## Santa Cruz River

### Abrego Drive Trailhead (THE[L]056)

Existing large trailhead located in the Green Valley area east of Interstate 19 and south of Continental Road. It has a shade structure and 15 vehicle parking spaces.

### Anza Trail Trailhead (THE[S]057)

Existing small trailhead location at the intersection of Elephant Head Road and Santa Cruz River Park.

### Columbus Park Trailhead (TH[S]058)

Potential small trailhead location at Columbus Park.

### Columbus Park Equestrian Trailhead (THE[L]059)

Potential large equestrian trailhead location at Columbus Park.

### Garden of Gethsemane Trailhead (TH[S]060)

Paths and trails are accessed at the northeast corner of north Bonita Avenue and west Congress Street from this three-tenths-acre special interest park.

### Heritage Park Trailhead (THE[L]061)

Potential large trailhead location on the Santa Cruz River Park, between Congress Street and Starr Pass Boulevard.

### Juhan Park Trailhead (THE[L]062)

This existing but only partially improved Community Park on the southwest side of the Santa Cruz River provides approximately 50 paved parking spaces along the north side of Copper Street and numerous unimproved parking spaces. Amenities also include a restroom, shade ramadas, and other typical park facilities.

### Ormsby Park Trailhead (TH[S]063)

This existing neighborhood park which provides potential access to the Santa Cruz River Park, is located approximately two blocks east of the River Park with approximately 15 paved parking spaces serving the park and accessed off of west 24th Street and west 25th Street. Restrooms, picnic/shade ramadas and other typical park amenities are available.

### Parque de Santa Cruz Trailhead (THE[L]064)

Potential large trailhead location at Santa Cruz River Park and Airport Wash Greenway.



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**Prince Road Trailhead (TH[S]065)**

Potential small trailhead location at Santa Cruz River Park and Navajo Wash Greenway.

**Sahuarita Trailhead (THE[L]066)**

Potential large trailhead location at Santa Cruz River Park, north of Sahuarita Greenway.

**Sanders Road Trailhead (TH[S]067)**

Potential small trailhead location at Santa Cruz River Park and Sanders Road.

**Silverbell/Ruthrauff Trailhead (TH[L]068)**

Potential large trailhead location southeast of Silverbell and Ruthrauff roads.

**Speedway Boulevard Trailhead (TH[L]069)**

Access to the Santa Cruz River is available south of Speedway Boulevard and west of Interstate 10 off of north Riverside Drive. Approximately 20 paved parking spaces, picnic/shade ramadas, a restroom, playground and other typical park amenities are available. An additional 15 plus paved parking spaces are available on the east side of the River, south of Speedway Boulevard, off of north Freeway Road.

**West Branch SCR Diversion Channel Greenway Trailhead (TH[S]070)**

Potential small trailhead location near Santa Cruz River Park and Paseo Rio Bravo.

**Santa Rita Experimental Range****Alvernon Extension Boundary Access Point (BAP087)**

Access point to Santa Rita Experimental Range where Alvernon Extension Backcountry Trails ends at the preserve's north boundary.

**Alvernon Way/Dawson Road Boundary Access Point (BAP088)**

Access point to Santa Rita Experimental Range where AlvernonWay/Dawson Road Backcountry Trails ends at the preserve's north boundary.

**Madera Canyon Road Boundary Access Point (BAP089)**

Access point to Santa Rita Experimental Range on Madera Canyon Road at the preserve's south boundary.



## Santa Rita Mountain Park

### Andrada Ranch Link Boundary Access Point (BAP090)

Access point to Santa Rita Mountain Park where Andrada Ranch Link Backcountry Trail enters the park on the east side.

### Mount Fagan East Loop North 1 Boundary Access Point (BAP091)

Access point to Santa Rita Mountain Park where Mount Fagan East Loop Backcountry Trail enters the park on the north side.

### Mount Fagan East Loop North 2 Boundary Access Point (BAP092)

Access point to Santa Rita Mountain Park where Mount Fagan East Loop Backcountry Trail enters the park on the north side.

### Mount Fagan East Loop South Boundary Access Point (BAP093)

Access point to Santa Rita Mountain Park where Mount Fagan East Loop Backcountry Trail enters the park on the north side.

### Mount Fagan West Loop Boundary Access Point (BAP094)

Access point to Santa Rita Mountain Park where Mount Fagan East Loop Backcountry Trail enters the park on the west side.

### Twin Tanks Boundary Access Point (BAP095)

Access point to Santa Rita Mountain Park where Twin Tanks Backcountry Trail enters the park on the east side.

## Southeast Regional Park

### Southeast Regional Park/Fairgrounds Trailhead (THE[L]071)

Trailhead, trails, and loop trails will be planned within the boundaries of the regional park.

## Sweetwater Preserve

### Sweetwater Preserve Trailhead (TH[S]072)

(see also Sweetwater Preserve Trails Park, TP026)

A new trailhead will be constructed at the 700-acre Sweetwater Preserve to provide access to the park's 10.4-mile trail system and a backcountry trail linking the Santa Cruz River park and Saguaro National Park Tucson Mountain Unit. The dirt lot near the northern boundary of the park, at the end of Tortolita Road, serves as an equestrian staging area and a trailhead for cars and light trucks.

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## **Sierrita Mountain Park**

### **Ash Wash Boundary Access Point (BAP096)**

Access point to Sierrita Mountain Park where Ash Wash Backcountry Trail enters the park on the west side.

### **Demetrie Wash Boundary Access Point (BAP097)**

Access point to Sierrita Mountain Park where Demetrie Wash Backcountry Trail enters the park on the east side.

### **Esperanza Wash Boundary Access Point (BAP098)**

Access point to Sierrita Mountain Park where Esperanza Wash Backcountry Trail enters the park on the southeast side.

### **Fresnal Wash Boundary Access Point (BAP099)**

Access point to Sierrita Mountain Park where Fresnal Wash Backcountry Trail enters the park on the north side.

### **McGee Ranch Road Boundary Access Point (BAP100)**

Access point to Sierrita Mountain Park where McGee Ranch Road Backcountry Trail enters the park on the east side.

### **Proctor Wash/Bob Brown Lateral Boundary Access Point (BAP101)**

Access point to Sierrita Mountain Park where Proctor Wash/Bob Brown Lateral Backcountry Trail enters the park on the south side.

## **Tortolita Mountain Park**

### **Cañada del Oro North 1 Boundary Access Point (BAP102)**

Access point to Tortolita Mountain Park where the Cañada del Oro Backcountry Trail enters the park, near the Meadowcrest Road alignment.

### **Cañada del Oro North 2 Boundary Access Point (BAP103)**

Access point to Tortolita Mountain Park where the Cañada del Oro Backcountry Trail enters the park, south of the Meadowcrest Road alignment.

### **Catalina Park/Flat Rock North Boundary Access Point (BAP104)**

Access point to Tortolita Mountain Park where the Catalina Park/Flat Rock Backcountry Trail enters the park.

### **Catalina Park/Flat Rock South Boundary Access Point (BAP105)**

Access point to Tortolita Mountain Park where the Catalina Park/Flat Rock Backcountry Trail enters the park.





## **Catalina State Park Boundary Access Point (BAP106)**

Access point to Tortolita Mountain Park where the Cañada del Oro Backcountry Trail enters the park, near the Rollins Road alignment.

## **Catalina State Park North Boundary Access Point (BAP107)**

Access point to Tortolita Mountain Park where the Bowman Road Backcountry Trail ends at the park boundary, on the Rollins Road alignment.

## **Cedar Breaks Boundary Access Point (BAP108)**

Access point to Tortolita Mountain Park where the Cedar Breaks Backcountry Trail enters the park.

## **Cochie Wash Boundary Access Point (BAP109)**

Access point to Tortolita Mountain Park where the Cochie Wash Backcountry Trail enters the park on the west.

## **Cochie Canyon Trailhead (TH[S]073)**

Potential small trailhead location in the Tortolita Mountains, north of Cochie Canyon Trail.

## **Cottonwood Wash Boundary Access Point (BAP110)**

Access point to Tortolita Mountain Park where Cottonwood Wash Backcountry Trail enters the park on the west.

## **Crow Wash Trailhead (TH[S]074)**

Potential small trailhead location in the Tortolita Mountains, south of Edwin Road, approximately on the La Cholla Drive alignment.

## **Honeybee Canyon Trail Boundary Access Point (BAP111)**

Access point to Tortolita Mountain Park where the Honeybee Canyon Backcountry Trail enters the park, near the Kachina Drive alignment.

## **Honeybee Canyon Trail East 1 Boundary Access Point (BAP112)**

Access point to Tortolita Mountain Park where the Honeybee Canyon Backcountry Trail enters the park, near Slippery Ridge Loop.

## **Honeybee Canyon Trail East 2 Boundary Access Point (BAP113)**

Access point to Tortolita Mountain Park where the Honeybee Canyon Backcountry Trail enters the park, near Windy Cliff Place.

## **Honeybee Canyon Trail East 3 Boundary Access Point (BAP114)**

Access point to Tortolita Mountain Park where the Honeybee Canyon Backcountry Trail enters the park, near Tortolita Mountain Circle.



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**Honeybee Canyon Trail East 4 Boundary Access Point (BAP115)**

Access point to Tortolita Mountain Park where the Honeybee Canyon Backcountry Trail enters the park, near Dusty View Drive.

**Honeybee Canyon Trail West Boundary Access Point (BAP116)**

Access point to Tortolita Mountain Park where the Honeybee Canyon Backcountry Trail enters the park, near Gibson Trail.

**[Honeybee Canyon Trailhead (TH[S]075)**

Honeybee Canyon is a popular semi-riparian canyon trail, about three miles in length. The trailhead has parking for 24 including four accessible spaces, restrooms, and drinking fountain.

**Honeybee Canyon Park Trailhead (TH[S]076)**

Honeybee Canyon Park Trailhead provides access to Honeybee Canyon park on the south side of Rancho Vistoso Boulevard between Honeybee Trail and Bentwater Drive.

**Little Cottonwood Boundary Access Point (BAP117)**

Access point to Tortolita Mountain Park on Little Cottonwood Wash Backcountry Trail.

**Oro Valley Trailhead (THE[S]077)**

Potential small equestrian trailhead location in the Tortolita Mountains, west of Hawk Canyon Trails and north of Turtle Dove Lane.

**Rafferty Trail Boundary Access Point (BAP118)**

Access point to Tortolita Mountain Park on Golder Ranch Drive.

**Swan Road alignment Boundary Access Point (BAP119)**

Access point to Tortolita Mountain Park on the Swan Road alignment.

**Tortolita Foothills East Boundary Access Point (BAP120)**

Access point to Tortolita Mountain Park where the Tortolita Foothills Backcountry Trail enters the park, near Horizon Ridge Drive.

**Tortolita Foothills West (BAP121)**

Access point to Tortolita Mountain Park where the Tortolita Foothills Backcountry Trail enters the park, near Cochie Wash Backcountry Trail.

**Trail 156 Oro Valley Boundary Access Point (BAP122)**

Access point to Tortolita Mountain Park where the Trail 156 Oro Valley Backcountry Trail enters the park, near Lobelia Way.



## **Twenty-seven Wash Boundary Access Point (BAP123)**

Access point to Tortolita Mountain Park where the Twenty-seven Wash Backcountry Trail enters the park.

## **Upper Javelina Trail Boundary Access Point (BAP124)**

Access point to Tortolita Mountain Park where Upper Javelina Backcountry Trail enters the park from the south.

## **Vulture Peak Trail Boundary Access Point (BAP125)**

Access point to Tortolita Mountain Park where Vulture Peak Backcountry Trail enters the park from the south.

## **Wild Burro Trail Boundary Access Point (BAP126)**

Access point to Tortolita Mountain Park where Wild Burro Backcountry Trail enters the park from the west.

## **Wild Burro Wash Boundary Access Point (BAP127)**

Access point to Tortolita Mountain Park where Wild Burro Wash Backcountry Trail enters the park from the west.

## **Wild Burro Trailhead (THE[L]078)**

Wild Burro trailhead has room for approximately 12 vehicles and is located on a temporary dirt parking area along the west side of Wild Burro Wash near the mouth of Wild Burro Canyon. The trailhead provides access to Wild Burro Wash and the trail system in the southern foothills of the Tortolita Mountains. The new trailhead near the Ritz Carlton Hotel will replace this temporary lot.

## **Tucson Mountain Park**

### **36th Street Trailhead (THE[S]079)**

The 36th Street Trailhead is located at the western end of 36th Street in the eastern foothills of the Tucson Mountains, and includes spaces for 22 cars and light trucks and four horse rigs. The trailhead provides access to Tucson Mountain Park's 62-miles of recreational trails.

### **Aldon Road Boundary Access Point (BAP128)**

Access point to Tucson Mountain Park where Aldon Road Backcountry Trail enters the park from the south.

### **Calle Anasazi Boundary Access Point (BAP129)**

Access point to Tucson Mountain Park where Calle Anasazi Backcountry Trail enters the park from the south.



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**Camino de Oeste Trailhead (TH[S]080)**

This parking area near the south end of Camino de Oeste and Greasewood Loop Backcountry Trail has room for 14 vehicles. The trailhead provides access to the Yetman Trail in Tucson Mountain Park.

**CAP/San Joaquin Boundary Access Point (BAP130)**

Access point to the Tucson Mountains where the Central Arizona Project Canal intersect San Joaquin Road.

**CAP/Sandario Trailhead (THE[S]081)**

The Sandario Trailhead is located near the southeast corner of the intersection of Sandario and Mile Wide roads within the Central Arizona Project corridor. It has space for 18 cars (including one accessible space) and 5 horse rigs. The trailhead provides access to the CAP National Recreation Trail, which connects to Tucson Mountain Park.

**Cat Mountain Trailhead (THE[S]082)**

The Cat Mountain Trailhead is primarily intended for equestrians and is an unimproved dirt parking area located on the boundary of Tucson Mountain Park. The site can accommodate five horse rigs.

**David Yetman West Trailhead (TH[S]083)**

A paved lot located just off Gates Pass Road on the west side of the pass at the bottom of the hill, this trailhead has space for 12 cars and provides access to Tucson Mountain Park's David Yetman Trail. Equestrian staging for Tucson Mountain Park is located at the Starr Pass East Trailhead.

**Explorer Trailhead (TH[L]084)**

The Explorer Trailhead is located at the back of the City of Tucson's Kennedy Park Fiesta Area parking lot, which is accessible from La Cholla Boulevard. The lot is large, but can fill during special events. This trailhead provides access to Tucson Mountain Park's Explorer Trail.

**Gates Pass Overlook Trailhead (TH[L]085)**

This paved staging area is located within Tucson Mountain Park's Gates Pass Overlook. It has space for 50 cars and serves the Gates Pass Trail. Equestrian staging for Tucson Mountain Park is located at the Starr Pass East Trailhead.

**Naomi Road Boundary Access Point (BAP131)**

Access point to Tucson Mountain Park where Naomi Road Backcountry Trail enters the park from the south.



## **Prospector's Extension Boundary Access Point (BAP132)**

Access point to Tucson Mountain Park where Prospectors Extension Backcountry Trail enters the park from the south.

## **Sarasota Trailhead (TH[S]086)**

A 2-space trailhead was constructed in 2007 at the end of Sarasota Road adjacent to Tucson Estates just south of the Tucson Mountain Park boundary. This trailhead provides access to the west end of the Starr Pass Trail in Tucson Mountain Park. Equestrian staging for Tucson Mountain Park is located nearby at the Starr Pass West Trailhead.

## **Shannon Wash Boundary Access Point (BAP133)**

Access point to Tucson Mountain Park where Shannon Wash Backcountry Trail enters the park from the east.

## **Starr Pass East Trailhead (THE[L]087)**

A primitive dirt parking area located immediately west of the Starr Pass development and adjacent to the Clearwell Reservoir at the end of Clearwell Road, this trailhead has room for 44 cars and 5 horse rigs. The trailhead provides access to the Tucson Mountain Park trail system via the Rock Wren Trail, and is the designated equestrian staging area for the east side of Tucson Mountain Park.

## **Starr Pass West Trailhead (THE[S]088)**

The Starr Pass West trailhead is a primitive dirt parking area on the boundary of Tucson Mountain Park at the end of the Starr Pass Road right-of-way. Starr Pass Road is located off of Sarasota Road, approximately 2,000 feet north of Kinney Road. This trailhead is primarily a staging area for equestrians, but can be used by other trail users as well.

## **Trails End Wash Boundary Access Point (BAP134)**

Access point to Tucson Mountain Park where Trails End Wash Backcountry Trail enters the park from the east.

## **Tucson Estates Parkway Boundary Access Point (BAP135)**

Access point to Tucson Mountain Park where Tucson Estates Parkway Backcountry Trail enters the park from the south.

## **Other**

### **Hi Corbett Field Trailhead (TH[L]089)**

Potential large trailhead located at Hi Corbett Field.



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**Orange Grove/Anway Trailhead (THE[L]090)**

Potential large trailhead location at the intersection of Orange Grove and Anway Roads.

**Tucson Medical Center Trailhead (TH[S]091)**

A paved parking area provides direct access to the Alamo Wash Path. The lot is behind and shared with an office complex south of Glenn and east of the Alamo Wash.





Finger Rock Trailhead





# Implementation and Funding

## In this chapter

Improvement action plan  
Funding options and opportunities

## A. Action Plan

### Policies

The adoption of this plan includes the approval of the following policies:

- The *Pima Regional Trail System Master Plan* has been formally adopted by all the jurisdictions.
- Developers whose projects encompass or abut the various elements included in this plan shall provide the right-of-way, as necessary, to implement them, consistent with expressed standards. Certain elements along roadways may be partially accommodated in the existing public right-of-way, if sufficient right-of-way exists. However, if sufficient public right-of-way does not exist, or if staff determines the final product will not provide the desired quality of experience, the developer shall provide additional right-of-way to achieve the desired minimum corridor widths as set forth in the design standards section of this plan.
- Developers constructing residential or commercial projects that abut one of the features of the system will be required to provide a corridor for and/or construct the subject feature. Projects located in proximity to a corridor (i.e. within one mile) will be required to contribute to the development of that (or those) system elements.
- Additions to this plan may be recommended by any participating jurisdiction but will be subject to review by the Director of the Natural Resources, Parks and Recreation Department and other participating agencies.
- Scenic Corridor Definition: add 'trails' to the kinds of elements that will be allowed in scenic corridors.
- Pima County and the five jurisdictions shall prepare a matrix for the major watercourses (over 10,000 cfs) which assigns maintenance responsibility using the following criteria:
  - Flood control and drainage facilities including but not limited to river and wash bottoms, bank protection, safety railings, wash/river bottom access ramps, should be the responsibility of the Flood Control District of Pima County



- Parks and Recreation Departments/Divisions in cooperation with Public Works/Transportation Departments/Divisions should be responsible for Paths and Trails and their related amenities such as but not limited to site furniture, sign installation and maintenance, pedestrian level lighting, plants and irrigation systems directly related to the path/trail, trash removal, sweeping, inspections, trail and path repair and replacement (unless the path acts as a primary pedestrian route along public roadways), weed control, trail and path cross drainage control, public education, revegetation, habitat enhancement and control, program budget development, volunteer coordination, records, and graffiti control
- Joint efforts between all jurisdictions could include law enforcement education, volunteer and staff training, corridor sign design, public education campaigns for safety, health, history and interpretation, and fund raising.
- In general, the jurisdiction that controls the majority (50+ percent) of the trail corridor should assume management responsibility for that corridor.

### *Projects*

All features listed in the Master Plan, beginning on Page 90, are potential projects or action items for completion. The projects were not prioritized because all features of the plan are deemed equally important to the overall continuity and function of the system. Some may be completed fully or partially through development agreements; others may come about through jurisdictions working in partnership. Some projects may occur in the distant future as redevelopment occurs and land currently unavailable becomes available.

Regional implementation projects to consider are:

- Region-wide trail events to focus the community's attention on their trails system.
- Education programs that teach trail etiquette, trail building skill for potential volunteers, or similar topics.
- Instigate regulatory changes as needed.
- A sign program developed with the guidance of all the jurisdictions.
- Promote a public art program associated with features of the trails system.



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## B. Funding Options and Opportunities

A variety of sources and mechanisms exist to fund the development of the Regional Trail System. They include:

### *Bond Funding*

In the past, the 1997 and 2004 Pima County Bond elections provided funding for river park and trail system development via general revenue bonds. It is expected that future Pima County bond programs will include some amount of funding for trail system development until the system is complete. Individual jurisdictions within Pima County may also conduct their own bond elections for trail system development.

### *Developer Contributions*

Consistent with the policies expressed in this section of this plan and Chapter 18 of the Pima County Code, developers whose property encompasses or abuts a trail corridor listed in the *Pima Regional Trail System Master Plan* will be asked, at a minimum, to provide a suitable corridor for the trail consistent with the master plan's standards element, and will likely be required to construct the segment. This approach has facilitated the development of portions of many trails listed on the master plan over the years, including several major river park segments.

### *Regional Transportation Authority*

The Pima Association of Governments administers RTA funds and in May of 2006 the RTA was given the authority to levy a sales tax increment to help build transportation infrastructure throughout the County. The RTA program included \$22.5 million for shared-use pathways and those funds will be used to develop the region's river parks and greenways system.

### *Transportation Enhancements Grants*

The federal government has provided funding through its various transportation programs over the years (ISTEA, TEA-21, and SAFETEA) through a category of funding called Transportation Enhancements (TE). Up to \$500,000 is available per project in each annual cycle of TE grants, which are administered by the Arizona Department of Transportation. The required match for TE projects is very low, presently just five and seven-tenths percent. Other sources of funds may also be available through federal transportation sources, including Safe Routes





to School and various safety programs. All of these programs should be used to help implement the Pima Regional Trail System.

### ***Starr Pass Environmental Enhancement Fee (EEF)***

The Starr Pass EEF was created as a part of the approval process for the Starr Pass Resort. This fee income comes from a portion of the sales taxes generated by the Starr Pass Resort and will exist for a period of 20 years. For the first ten years of its existence, 75 percent of these funds will go to Starr Pass for various projects; 25 percent will accrue to the Pima County Natural Resources, Parks and Recreation Department for use in the enhancement of Tucson Mountain Park. In the second ten-year period, the distribution will reverse, with 75 percent going to Pima County and 25 percent going to Starr Pass. To date, EEF funds have been used to construct trailhead parking facilities and improve the trail system within Tucson Mountain Park. In the future, EEF funds will be used to construct the trail system within the park's Robles Pass Trails Park unit and will make a large difference over time in the development, re-development, and maintenance of trails at Tucson Mountain Park.

### ***Regional Flood Control District Levy***

The Pima County Regional Flood Control District's ability to levy a tax to fund its operations has contributed to the development of the river park system in the past through the installation of critical infrastructure, and could contribute to such development in the future. The RFCD's funding stream, coupled with bond funding, will play a role in the reconfiguration of the confluence between the Rillito, Tanque Verde, and Pantano wash corridors, creating space on the banks for river park to be developed.

### ***U.S. Army Corps of Engineers***

In the past, Pima County has partnered with the U.S. Army Corps of Engineers (Corps) to construct segments of the river park system at the time bank protection was installed. As bank protection and/or habitat restoration projects continue, the resources of the Corps will be used wherever possible to help develop the river park system.

### ***U.S. Bureau of Reclamation/Central Arizona Water Conservation District***

The U.S. Bureau of Reclamation makes funding available for the development of the CAP Trail through its 50-year Recreational



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Development Agreement with Pima County, which was executed in 1986. The Phoenix-based operator of the canal, the CAWCD, recently created a complementary program to provide funds for recreational development along the CAP. Both of these sources will be used to develop the CAP Trail.



### ***Federal Agency Cost-Share Programs***

Federal land management agencies such as the National Park Service and the U.S. Bureau of Land Management operate “Challenge Cost-Share” programs that in the past have provided 50-50 matching funds to assist with the development of projects in their jurisdictions. While these funds have been in scarce supply since 2000, they may become available again in the future, and be made available for trail projects.

### ***Arizona Heritage Fund***

Arizona State Parks administers the Arizona Heritage Fund, which provides 50-50 matching grants for the development of trails and parks. The trail grants tend to be on the small side, between \$50,000 and \$100,000. The river park, greenway, and trail projects included in this plan are eligible for funding through the Heritage Fund’s various grant categories, particularly the Trails Heritage Fund.

### ***Land and Water Conservation Fund (LWCF)***

Federal LWCF funding has helped construct trail projects in the past. The first segment of the Old Spanish Trail Bicycle and Pedestrian Path was constructed in the 1970s using this funding. LWCF funds, administered through the state of Arizona, have been unavailable for many years, but may become a valuable funding source in the future.

### ***Demonstration Project Dollars***

Demonstration project dollars are sometimes available from a variety of federal and state sources, and will be pursued by staff as such opportunities are identified.

### ***General Fund***

General fund monies could conceivably be used to develop trails and related features, but receiving general fund dollars for this purpose is a relatively rare occurrence. General funds may be looked to for small projects such as signs or promotional campaigns.





### *Donations*

Donations of all kinds from local businesses, groups, and individuals can be used to help develop the Regional Trail System, and will be pursued as opportunities arise. An excellent example of how donations can help the development of the regional system is the land donation El Paso Natural Gas (EPNG) made to Pima County in 2005. EPNG donated a 1.5-mile corridor, up to 300 feet wide for a total of 33 acres, that will be used to develop the Manzanita Greenway. The donated land had an appraised value of \$300,000. Another corridor donation from EPNG is presently in the works.

### *Special District*

The lack of a consistent stream of funding has been a problem for the development of the Regional Trail System for over 25 years, and is one of the reasons that the river park system has taken so long to materialize. The creation of a special district for the river park and greenway system has been suggested as a mechanism through which these valuable community features could be constructed in real time, and would also provide a source for maintenance.

### *Volunteer Opportunities*

Volunteer organizations are sources of assistance for many city and county trails and parks departments. They are strong supporters of trails, expanding the trail system, and can also offer physical assistance in trail building and maintenance. Ways to use these organizations include trail adoption programs (organizations patrol and maintain a given segments) and annual county-wide maintenance days (when citizens are called to assist in large-scale clean ups).





# Appendices

## A-1: Pedestrian Latent Demand Assessment

The data inputs used in the formal Latent Demand Model have been simplified into a more intuitive approach to determine latent demand in an area: The Pedestrian Latent Demand Assessment. The following process can be used to match pedestrian accommodations to an anticipated level of pedestrian activity. The resulting score for an area is equated to specific levels of pedestrian enhancements.

### LATENT DEMAND CALCULATION

Characteristic	Variable Within The TAZ	Score
1) Land use mix (residential densities, retail, office, public, quasi-public, industrial, other. Agricultural and inaccessible open space not counted as a land use)	5 or more land uses	+3
	2-4 land uses	+2
	1 land use	+1
	Agricultural or inaccessible open space	+0
2) Public schools and universities	4000+ students	+3
	1500-3999 students	+2
	< 1499 students	+1
	No schools	+0
3) Public facilities (libraries, city hall, community centers, etc.)	3 or more facilities	+3
	2 facilities	+2
	1 facility	+1
	No facilities	+0
4) Public parks	Regional park	+3
	Community park	+2
	Neighborhood park	+1
	No parks	+0
5) Unpaved Trails and Paved Pathways	Trails and/or Pathways providing access to regional destinations	+3
	Trails and/or Pathways providing access to community destinations	+2
	Trail and/or Pathway providing access to local or neighborhood destinations	+1
	No Trails or Bikeways present	+0
6) Population density	8+ DU/AC	+3
	4-8 DU/AC	+2
	< 4 DU/AC	+0
7) Income level	< \$18,600	+3
	\$18,601 - \$42,300	+2
	\$43,301 or more	+1



**LATENT DEMAND CALCULATION**

Characteristic	Variable Within The TAZ	Score
8) Age Demographics	Area has many young and/or many older pedestrians	+3
	Area has typical mix of young and old	+2
	Area has few young and/or older pedestrians	+0
9) Employment values within PAG's traffic analysis zonal data (jobs per square mile)	4,000 or more	+3
	1,500 – 4,000	+2
	< 1,500	+1
10) Trailheads and Park and Ride lots	> 100 parking spaces	+3
	50 to 99 parking spaces	+2
	< 50 parking spaces	+1
	No trailheads or park and ride lots	+0
11) Bus, train or Modern Streetcar station	Bus, train and Modern Streetcar station	+3
	Two of three stations	+2
	One of three stations	+1
	No stations	+0
12) Modern Streetcar stop	More than one	+3
	One	+2
	None	+0
13) Bus stop and/or routes	More than one	+3
	One	+2
	None	+0
TOTAL PROJECT SCORE:		
maximum score:		39
minimum score:		2

Score of 31-39 = LEVEL 1: Pedestrian District = Highest latent demand = highest potential for pedestrian activity = areas of high intensity with a wide variety of land uses with = downtowns, major university campuses, areas around large regional shopping malls, newly built "town centers"

Score of 23-30 = LEVEL 2: Pedestrian Activity Area = Moderate latent demand = moderate potential for pedestrian activity = high intensity areas with a single or limited mix of land uses =

Score 3-22 = LEVEL 3: Pedestrian Zone of Low Latent Demand = moderate to low potential for pedestrian activity = areas of low to medium intensity with little to no mix of land uses



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## **A-2: Maintenance Standards**

Trails are identified on the Regional Trail System map; however, that does not mean that all these trails are to be maintained by the County. The map serves as a guide to area residents and tourists, showing them the network of trails that are available in the region, regardless of ownership. Trails, for instance, are shown in the state and federal preserves for reference only, and are only as current as the latest information from that entity. The trails of this master plan do not supersede the master planning efforts of any agency.



Maintenance tasks should be prioritized in the following order 1) correct unsafe conditions 2) repair environmental damage and 3) restore system to desired condition.

One of the first steps in trail and path maintenance is design. Plan ahead to minimize them through appropriate design and quality construction. Trails and paths that currently require a high level of maintenance should be evaluated for possible redesign or realignment.

### **Routine**

#### **Routine Inspection**

Having a trail system that is clean and well kept will encourage people to use it. Routine inspection is integral to this effort. Inspections should include the trail/path surface, drainage crossings, site furnishings, signs, and vegetation. Also, all inspections should be documented (date, location, condition, work needed). Maintaining a schedule for the items listed below is key to keeping the trail system clean and safe. Every major problem on a trail was once a small problem that went unnoticed, so a thorough inspection is time and money well spent.

#### **Sweeping and Debris Removal**

Keeping paths swept of debris is critical for roller bladers, bicyclists, and users with physical challenges. Paths should be cleared of all debris including sand, mud, and leaf litter. Long distances can be swept by machine. Spot sweeping may be more efficiently done by hand or with blowers. If there is a large amount of debris, it should be collected and removed from the area.

#### **Trash Removal**

Clean up of litter along the trail system and emptying of trash receptacles is both a safety and aesthetic issue. Frequency of clean up will depend on trail use and location.



**Tree and Brush Trimming**

Pruning is performed for safety concerns. Keeping the paths and trails clear of overhanging or intruding branches will prevent user injury. Note any vegetation that needs to be replaced.

**Graffiti Removal**

Graffiti left unattended encourages more graffiti. Graffiti should be documented, reported to local authorities, and removed immediately.

**Drainage Structure Clean Out**

Drainage structures can become clogged with trash and debris with can cause flooding or undercutting of nearby paths and trails. If a culvert needs to be unclogged frequently, then it may need to be replaced.

**Periodic or As-Needed****Repairs to Signs, Site Furnishings, and Vegetation**

Amenities need to be kept in aesthetically pleasing condition. If they become damaged or appear in disrepair, they can become a target for vandalism. Repairs to trail signs that impact user safety should be considered first in importance. Vegetation areas that have been damaged should be revegetated to minimize erosion.

**Path and Trail Repairs**

Repairing damaged trails quickly will prevent greater damage from occurring and helps extend the life of the trail. Timing of trail and path repairs will depend on the needed repair. If they impact user safety, repairs should be made as soon as physically possible, depending on whether they can be made by the maintenance crews or need to be completed by an outside entity.

- Repair concrete cracks with joint sealer as soon as possible to prevent further moisture from penetrating.
- If a concrete section heaves or cracks extensively, break out and repour the section.
- Seal asphalt cracks as soon as possible to prevent moisture from reaching the base course.
- If the surface of asphalt paths looks dry or ravel, the path is overdue for a seal coat. Seal coating should occur before raveling begins.



### Trail Closures

At times, trail sections may need to be closed due to hazardous conditions. Causes could include when heavy rains cause trail washouts or a landslide blocks the use of the trail. Non-trail construction near a trail could also force trail closure because of safety concerns. Any condition which causes a trail closure should be corrected as soon as possible and the trail reopened to the public.

When trails need to be closed due to trail improvements, signs should be posted several days in advance of the closure, informing trail users of the closure dates and an alternate route is available.

### Social Trails

If unplanned and unofficial social trails appear, first consider whether the public is voting with their feet. Before closing the trail, consider whether it might legitimate and should be included as a trail improvement.

### Prioritize

Prioritize trail maintenance based on 1) safety reasons 2) repairs to environmental damage, and 3) repair to desired conditions.

## INSPECTION SCHEDULE

Activity	Frequency
ROUTINE INSPECTION	
Sweeping	Every three weeks. If sediment collection occurs frequently, determine the source of the sediment and what solution can prevent it from continually occurring.
Empty trash receptacles	Every week
Litter cleanup	Every four weeks
Tree and brush trimming	Every three months





**INSPECTION SCHEDULE**

Activity	Frequency
Graffiti removal and vandalism repair	As needed
Drainage structure clean out	As needed; check after storms
<b>PERIODIC INSPECTION</b>	
Repairs to signs, site furnishings, and vegetation	As needed
Structure inspection	Inspect all structures (walls, bridges, drainage crossings, railings, signs) for damage. Repair any damage that compromises the functionality or aesthetics of the structure or any minor damages that will become worse if not repaired now.
Trail repair	As needed (full replacement every ten years)
Path repair	As needed (full replacement every ten years for asphalt, every 20 years for concrete)
Erosion	Look for erosion occurring along the edges of the path and determine what solution (rip rap, vegetation) will minimize damage.
Social Trails	Note where they are occurring and determine if they should be posted as 'No Entry'

**Stewardship****Trail Promotion**

Consider promoting the opening of each new trail or path segment or new trail head or trail park. Publicize an on-site dedication and invite the press to run a story describing the new element. This effort will help to reinforce to the public that these opportunities are available and are open to the public.

**User Feedback**

Comments should be collected from the public where possible. Opportunities are suggestion boxes at trail heads and trail parks, through a survey link on the County's Web site, and at public gatherings where similar topics are being discussed. The comments should be reviewed for issues, success, failures, possible improvements, and user satisfaction. The comments should be considered a learning tool, not a criticism of work done poorly.



### A-3: City of Tucson List of Bicycle Boulevard Projects

Reference #	Plan Status	Project Name	Location	Description	Length (mi)
1bb	New	Fairview/15th Ave (Collector)	Speedway Blvd	Tucson Mall	Enhanced Urban Corridor Improvements
2bb	New	Timrod /14th St/Williams	Ried Park	Park Place Mall	Bike Blvd Improvements
3bb	New	Liberty / Missiondale	Cushing	Los Reales	Bike Blvd Improvements
4bb	Funded	Fontana/4th Ave	Prince	University Blvd	Bike Blvd Improvements
5bb	New	Warren	Ft. Lowell	Aviation	Bike Blvd Improvements
6bb	New	Plummer	Grant	Speedway	Bike Blvd Improvements
7bb	New	Cherrybell / Campbell	Aviation	Elm	Bike Blvd Improvements
8bb	New	Euclid Ave	18th St	El Paso Greenway	Bike Blvd Improvements
9bb	New	Treat/Cactus/Christmas	18th St	El Paso Greenway	Bike Blvd Improvements
10bb	New	Camino Miramonte/Howard Ave/Palo Verde	Aviation	Rillito	Bike Blvd Improvements
11bb	New	Palo Verde	Arroyo Chico Bikeway	Ft. Lowell	Bike Blvd Improvements
12bb	New	Dodge	Aviation	22nd St	Bike Blvd Improvements
13bb	New	Irving	El Con Mall	Rillito	Bike Blvd Improvements
14bb	New	Columbus	3rd Street	22nd St	Bike Blvd Improvements
15bb	New	Desert/Calalina/Goyette	29th St	Rillito	Bike Blvd Improvements
16bb	New	Arcadia	Glenn	22nd St	Bike Blvd Improvements
17bb	New	Beverly/Wyatt	Grant	Arroyo Chico Bikeway	Bike Blvd Improvements
18bb	New	Sahuara	Aviation	Glenn	Bike Blvd Improvements
19bb	New	Jessica/Mann/Sirio	Stella	Carondelet	Bike Blvd Improvements
20bb	New	Prudence (Collector)	Escalante	Broadway	Enhanced Urban Corridor Improvements
21bb	New	Sarnoff /29th St	Speedway Blvd	Old Spanish Trail	Bike Blvd Improvements
22bb	New	Rogier (Collector)	La Cholla	Tucson Blvd	Enhanced Urban Corridor Improvements
23bb	New	Blackledge	Oracle	Columbus	Bike Blvd Improvements
24bb	New	Glenn (Collector)	Fairview	Sahuara	Enhanced Urban Corridor Improvements
25bb	New	Jacinto/Copper/Flower	Fairview	Swan	Bike Blvd Improvements
26bb	New	Seneca/Waverly	Wilmit	4th Ave	Bike Blvd Improvements
27bb	New	Lester/Elm/Pima	Wilmit	15th Ave	Bike Blvd Improvements
28bb	New	Drachman/Fairmount	Wilmit	Oracle Rd	Bike Blvd Improvements
29bb	New	Univ (Collector)/3rd St/Rosewood	Main	Wilmit	Bike Blvd Improvements/ Enhanced Urban Corridor
30bb	New	5th St / Vicksburg / 7th St	Pantano	Houghton	Bike Blvd Improvements
31bb	New	Alameda / El Rio / Dragon	Grant / Greasewood	Santa Cruz River Path	Bike Blvd Improvements
32bb	New	9th St/8th St	4th Ave	Country Club	Bike Blvd Improvements
33bb	New	Arroyo Chico Bikeway/Kenyon	Aviation	Harrison	Bike Blvd Improvements
34bb	New	18th St	Santa Cruz River Path	Cherrybell	Bike Blvd Improvements
35bb	New	27th St/Sylvain	Bristol	Ave. Sifio	Bike Blvd Improvements
36bb	New	33rd St/Calle Marte/29th	Sahuara	Old Spanish Trail	Bike Blvd Improvements
37bb	New	Stella / Emily	Aviation Bikeway at Wilmit	Houghton	Bike Blvd Improvements
38bb	New	Michigan	Benson Hwy	Santa Cruz River Path	Bike Blvd Improvements
39bb	New	Bilby / Bonney	Santa Clara	Benson Hwy	Bike Blvd Improvements
40bb	New	9th Ave	Ft. Lowell	Franklin	Bike Blvd Improvements
41bb	New	Plummer	Elm	Aviation Bikeway	Bike Blvd Improvements
42bb	New	S. 4th Avenue	Broadway	I-10	Bike Blvd Improvements
43bb	New	Santa Clara / 15th and 16th Ave	Los Reales	44th St	Bike Blvd Improvements
44bb	New	Prudence/Grady/Pio Decimo	Tanque Verde Wash	Pantano Wash	Bike Blvd Improvements
45bb	New	Fairland Stravenue	Cherrybell	Kino Sports Complex	Bike Blvd Improvements
46bb	New				
47bb	New				
					180.7

Contact the City of Tucson Dept. of Transportation Bicycle & Pedestrian Program Manager for additional information.



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## ***A-4: Document Review***

### **Fantasy Island**

This 335-acre site is near the intersection of Irvington and Houghton roads within the City of Tucson, specifically within the urban core boundaries. One of the challenges with this site is its location in one of Tucson's fastest growing real estate markets, which may lead the State Land Department to bring to public auction the Trust Land portion of the site. The Community has played a strong role in voicing their concern for the loss of this recreation area. As part of the HAMP plan, this area was unanimously adopted as a protected recreation site. It has evolved into a popular mountain bike 'trails park' used by racers, law enforcement for training, and manufacturers for testing.

Conclusion: urban 'trail parks' are popular and viable

### **Houghton Area Master Plan (HAMP)**

The HAMP area encompasses 10,800 acres (16.9 sq. miles) of land along Houghton Road, which falls within the very eastern portion of the urban core area. One of the values that this plan supports is a transportation and circulation system that offers residents alternatives for mobility, giving high priority to pedestrian, bicycle, and transit modes. The plan is also intended to serve as a regional open space system.

Conclusion: the new area master plans are recognizing the importance of regional trails and connectivity

### **City of Tucson Parks & Recreation Ten-Year Strategic Service Plan**

Within this plan, strategic directions were identified in the final phase. One of the directions that was recognized was the importance of connectivity between parks, open space, and recreational facilities. This goal supports the need to develop a pathway and trail system that links City and County parks, consistent with the goal of the Eastern Pima County Trails Master Plan (Master Plan). One policy identified in connection with this goal included providing easy access to community assets and connection of parks, facilities, and natural resource areas. An urban pathway element was also developed to provide a framework to continue building an interconnected system of urban trails, greenways, and open spaces. A trail classification system is included in this document to depict the diversity and character of Tucson trails, including various types and configurations of urban paths and trails.

Conclusion: use this plan to build on for the Master Plan

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### **Urban Landscape Management Plan**

As part of this plan, a year-long Livable Tucson Visioning Program was initiated. One of the goals of this program was to “ease traffic congestion” through the expansion of community members using alternative transportation methods.

Another principle put forth in this document is the importance of sustainability and the role of preserving natural washes and other open spaces as well as the prevention and mitigation of urban heat island effects. Both of these principles are consistent with the goals of this plan.

Finally, this plan puts forth the value of green infrastructure, defined as an interconnected network of green space that conserves natural ecosystem values and functions and provides associated benefits to human populations.

Conclusion: the goals of this plan are consistent with the Master Plan

### **Oro Valley Task Force (2002)**

The purpose of the report is to accelerate the Town of Oro Valley’s Trail System. In 1994, the Town of Oro Valley adopted the same trails identified in the Eastern Pima County Trail System Master Plan (the current version at the time) as part of the Town of Oro Valley’s POST Master Plan.

This report examines the various trails located in Oro Valley including-protected (public access is legally secured), high opportunity trails (controlled by few private landowners or the property is a potential candidate for re-zoning), and low opportunity trails (controlled by many private land owners or the property is a potential candidate for re-zoning). Under each trail, the report lists the problems, recommendations, uses, public access entry points, trail design guidelines, and funding sources. The report recognizes that there are important linkages to the Town’s trail system that are in the County’s jurisdiction and goes on to describe implementation methods for acquiring trail access on private land.

### **KEY INFORMATION**

- Most of Oro Valley’s proposed trail systems are located along secured corridors or land with development restrictions.
- 52 percent of the Town’s trail system crosses private property.



- Property owners need a clear understanding of who will be responsible for the liability and maintenance of trails intended for public use.
- 36 percent of Oro Valley's trail system is protected.
- They plan to consult with Pima County twice a year to secure trail corridors linking with Oro Valley's trail system.
- As of 2002, there were three existing public trailheads and two additional trailheads recommended.

Conclusion: Oro Valley works with the County to connect trails into a network

#### **Pima-Tucson Trails: The Next Five Years (1992)**

The purpose of this report is to recommend a focus for trail development for the next five years and develop a plan for implementation.

Create a 35-mile trail loop in the Tucson metropolitan region, called Los Rios Loop, along rivers and urban washes, linking together the river parks, downtown Tucson, and many neighborhoods and community parks.

- Interim River Trails
  - Pima County has developed river parks as mitigation for flood control projects and will continue to construct new segments over the next 15 years.
  - Can be built in the meantime, at lower cost to connect existing river parks and provide over 20 miles of continuous trails.
- Arroyo Chico Linear Park
  - A trail and linear park connecting with Pantano Wash and Santa Cruz River Park was proposed within the plan to help with connectivity.
- Rodeo Wash Park
  - Rodeo Wash is a prime opportunity for a trail corridor in southwest Tucson.
- El Camino Central
  - An enhanced pedestrian and bicycle route connecting the Santa Cruz River Park, the Tucson Convention Center, and historic El Hoyo Barrio is another step toward downtown revitalization.

Protect public access to trails within Coronado National Forest and Saguaro National Monument by establishing three new public staging areas:



- Pima Canyon into Coronado National Forest
- Camino del Cerro into Saguaro National Monument
- Agua Caliente County Park into Coronado National Forest

Trail Development Strategies – describes steps which can be taken in the near future to promote coordination among the various agencies and organizations with an interest in trails. In addition, Pima County and the City of Tucson will continue to negotiate with private property developers to develop trails identified in the adopted trail plans.

Conclusion: many of the projects have been implemented

### **Pinal County Trails Plan (2005)**

The purpose of the plan is to facilitate a planning framework to create a countywide system of non-motorized trails and a system of motorized trails.

Encourage coordination and cooperation among adjacent counties, agencies, tribal governments, municipalities, and the public in trail planning and development.

- Collaborate to provide public trail links to regional trail systems.
- Coordinate with public agencies and private developers to ensure public trail connections and access points are planned, constructed, and maintained.
- Identify proposed corridors and/or segments needed to link communities within Pinal County.

The foundation of the plan is built around three primary regional corridors:

- The Arizona Trail
- The Central Arizona Project (CAP) canal corridor
- Juan Bautista de Anza Historic Trail

### **KEY INFORMATION**

Arizona State Parks, in partnership with ASU, conducted an extensive research and public involvement process and came up with the following findings:

- Approximately two-thirds of Arizona residents consider themselves trail users.



- 63 percent of respondents participated in non-motorized trail use at some point during their time in Arizona.
- 24 percent of respondents participated in motorized trail use at some point during their time in Arizona.
- Declining public access to trail opportunities is a priority of concern of Arizona's trail users.
- Trail support facilities (trailheads, restrooms, etc) are important to both non-motorized and motorized users.

### Trail Liability

- Arizona has enacted laws that limit both private and municipal landowner, liabilities (Arizona Revised Statutes). On the private side, these laws are called Recreational Use Statutes.

Conclusion: many of the projects have been implemented

### Rincon Valley/Southeast Subregional Plan (2004)

As part of the City of Tucson's General Plan, subregional plans were developed to establish future land use and development direction for areas that are adjacent to the City and have potential for future City annexation.

- The Rincon/Southeast Subregion covers approximately 400 square miles, the majority of which is rural and sparsely populated.
- The topography and natural resources of the area vary greatly.
- The Rincon Southeast Subregional Plan is intended to guide future development in the subregion so that environmental quality, scenic resources, and community character are protected and enhanced.

### Regional Trail System

Regional trail system policies are intended to support the implementation of a public trails network, as identified in Eastern Pima County Trail System Master Plan (Master Plan) and shown on the City of Tucson Parks, Recreation, Open Space and Trails (PROST) System Conceptual Map. Examples of high priority trail system elements include, but are not limited to, primary trails identified in the Master Plan, trail corridors that link individual public lands units, connect public lands with existing or planned river parks, create local trail linkages to parks, schools, or activity centers, or provide public access to established public lands trails. The regional network will expand on the existing and planned river park system to include natural tributary washes and upland segments, and





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road and utility rights-of-way that together will form an interconnected system linking urbanized areas with surrounding public preserves.

#### Policies

a. As determined by the Department of Parks and Recreation, dedication of particular trail system elements shall be required as a condition of rezoning approval and shown on the development plan or plat.

b. Regulatory floodprone areas which are dedicated as drainage easements to the City of Tucson or Pima County Flood Control District and which are identified as trails on the Master Plan or PROST shall also allow additional uses, such as recreational and equestrian activities, in the dedicated right-of-way or easement. Such allowable additional uses shall be designated on the development plan or plat as part of a master circulation plan.

c. Any fencing of or along an existing or proposed trail corridor shall meet the specifications of the Department of Parks and Recreation and said specifications shall be included as a condition of rezoning or planned area development approval.

d. Vehicular access to trailheads at public preserve boundaries shall be promoted based on a determination by the public lands manager and the Department of Parks and Recreation. In those cases where road access to public lands trailheads is deemed critical, dedication of public roads rights-of-way and associated parking and equestrian staging areas shall be required as a condition of rezoning or planned area development approval.

e. Trails and paths within the project site shall connect with the regional trail system to provide access to open space and recreational opportunities for community residents.

f. If the project site contains a route identified on the Master Plan or PROST that provides irreplaceable access to a public preserve boundary, public access through the site shall be provided.

Conclusion: the goals of this plan are consistent with the Master Plan

#### **Rincon Valley Subregional Trails Plan (1998)**

This plan is a subregional elaboration of the Eastern Pima County Trail System Master Plan (1989) and represents collective efforts to create



a network of recreational trails in the Rincon Valley (approximately twenty miles east of Tucson and south of the Rincon Mountains). The proposed trail system will consist of 21 trails totaling more than 100 miles in length. When fully implemented, this trail system will provide trail access throughout the Rincon Valley and link Saguaro National Park, the Coronado National Forest, Colossal Cave Mountain Park, the Cienega Creek Natural Preserve, and the Pantano River Park.

The following are the recommendations for the creation of a trail system in the Rincon Valley:

- Identify significant trail corridors, linkages, and access points
- Recognize sensitive resources
- Suggest potential uses suitable for each trail corridor
- Propose an Arizona Trail alignment west of the Rincon Mountains
- Identify environmental education and interpretive themes and opportunities
- Examine costs for trail construction and maintenance
- Trail System
- Shared-use is recommended on most trails to accommodate hikers, bicyclists, and equestrians.
- It is recommended that all trails be natural-surface trails.
- The trails in the plan will not be open to motorized use.

Conclusion: the goals of this plan are consistent with the Master Plan

### **The El Paso & Southwestern Greenway Master Plan (2005)**

The purpose of this report is to aid in the planning and design of an urban greenway along the abandoned El Paso and Southwestern Railroad corridor. It is purely conceptual in nature and intended to generate ideas and provide guidance as the greenway master plan continues to evolve. The planning process was inevitably linked with the City of Tucson and Rio Nuevo, Pima County, the City of South Tucson, and various neighborhood groups.

Six goals arose out of the design philosophies and served to guide the development of the project:

- 1) coordinate with other active projects to ensure compatibility
- 2) promote connectivity and recreation
- 3) reflect regional and local identity and character



- 4) celebrate local history
- 5) provide physical comfort and safety
- 6) provide a catalyst for positive development

Specific design recommendation guidelines were established to direct future planning surrounding the greenway:

1) Alignment/route

- Follow historic alignment where possible
- Provide alternate routes where historic alignment is difficult

2) Preservation

- Preserve historic tracks where possible
- Plan for a future streetcar corridor where appropriate

3) Trail

- Provide an uninterrupted multi-use path where possible
- Street and rail crossings
- Separate path from road where possible
- Separate pedestrians from bicycles
- Let path double as a vehicular access road to potentially satisfy HURF requirements

4) Comfort

- Safe and convenient street crossings
- Amenities adjacent to path
- Full accessibility for the disabled

5) Development

- Be flexible about greenway width depending on circumstances
- Integrate greenway goals into other projects
- Maximize development opportunities along greenway

6) Access and Connectivity

- Maximize neighborhood access to the greenway
- Maximize connectivity to other paths and destinations

Conclusion: the goals of this plan are consistent with the Master Plan



**Growth and Development in Southeast Tucson (2004)**

The “Southlands” area of the Tucson metropolitan area is located both within the City limits and also within unincorporated Pima County. The Southlands area has been subject to increasing growth and development pressure. The City would like to manage this trend in a manner that will support the long-term planning of the region. The State of Arizona, through its Land Department, is a key partner in this effort.

**KEY INFORMATION**

- The Southlands area contains 1,083 square miles; 868 are vacant. State Trust Lands constitute 418 square miles of this vacant land.
- The area currently contains over 50,000 residents, a 282 percent increase since 1980.
- The population of the area is projected to reach 250,000 residents by the year 2030.
- Most of the Southlands area within the City has been annexed since 1980.
- The need to plan effectively for the Southlands area is identified in the City’s General Plan. An important statement:
  - Expand the regional trail system and connect it with the Pima County system.
- In response to the increased growth in the Southlands area, there are a number of planning processes underway including: Houghton Area Master Plan; Davis Monthan Air Force Base Joint Land Use Study; transportation plans for Sahuarita Road, Houghton Road, and I-10; and the Sonoran Desert Conservation Plan.
- Major developers are planning private projects in the Southlands area.
- While much of the land in the area is vacant State Trust land, planning must occur now in order to ensure effective growth management.

The Southlands area presents the opportunity to work with one major land owner, the State, to master plan the majority of this area.

Conclusion: the Southlands is almost a blank slate with the opportunity to incorporate a trails network into new developments

**U.S. Army Corps of Engineers plans – Tres Rios del Norte (TRDN) (2006)**

This study effort is a joint partnership between Pima County, the City of Tucson, the Town of Marana, and the Corps of Engineers, Los Angeles District. The TRDN study area is comprised of a 2- to 3-mile-



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wide corridor that extends along an 18-mile-long reach of the Santa Cruz River, from Prince Road to Sanders Road. It has a total land area of 19,800 acres (30.9 square miles). It is situated in the northwestern portion of the Tucson metropolitan area, and includes portions of the City of Tucson, the Town of Marana, and unincorporated Pima County. Within the study area, the Santa Cruz River has confluences with two major tributaries, the Rillito River and the Cañada del Oro.



- The primary problem and focus of much of the efforts discussed in the report relates to the severe degradation and loss of riparian habitat along the Santa Cruz River.

Continued population growth in and around the TRDN study area has lead to an increased demand for recreation that includes trails for hiking, biking, and jogging. Recreational opportunities in the TRDN study area are likely to expand as new parks are designed and implemented. New recreational development, such as new parks, will be consistent with local recreation master planning efforts. The opportunity exists to provide passive recreational opportunities that extend throughout the TRDN study area in conjunction with the ecosystem restoration and water supply purposes. In addition, there is an opportunity to connect recreation features within TRDN with the larger regional trail and river park system.

#### Baseline Conditions

There are numerous watercourses that drain into the Santa Cruz River. These range from the large tributaries of Cañada del Oro Wash and the Rillito River to smaller washes that convey flows from the Tucson Mountains and from the Tortolita Mountains. Historically these washes have provided important pedestrian, equestrian, and wildlife routes to and from the Santa Cruz River from adjacent areas

Trails and washes that are important links of the Pima County Trails Master Plan and fall within the study area include the following:

- Primary Trails: Greasewood Loop, Trails End Wash, Sweetwater Wash, Belmont Road, Wildhorse Wash, Picture Rocks Wash, Wild Burro Wash, Gas Pipeline, Roger Wash, Idle Hour Wash, Yuma Mine Trail, Silverbell Road, Juan Bautista de Anza National Historic Trail, and CAP Canal Line.
- Secondary Trails: Joplin Lane/Cortaro Farms Road and El Camino de Mañana Wash.



One of the primary regional trails, the CAP Canal Line Trail (currently being developed), connects with the Wild Burro Wash Trail near Tangerine Road and, when complete, would link Tucson Mountain Park with Tortolita Mountain Park.

### Recommended Plan

- Ecosystem Restoration Component
- Flood Damage Reduction Component
- Water Supply Component
- Recreation
  - Marana District Park – located in the vicinity of the Tucson Ready Mix Pit, near the confluence of the Santa Cruz River and Cañada del Oro Wash
  - Pedestrian trailheads – eight pedestrian trailheads
    - Each pedestrian trailhead includes parking stalls, access road for trail maintenance, area lighting, restroom, drinking fountain, and a bike rack
  - Equestrian trailheads – four equestrian trailheads
    - Each equestrian trailhead is configured to accommodate access and parking for vehicles pulling horse trailers
    - Additional trailhead features include a water trough, picnic ramada, picnic tables, drinking fountain, restroom, bike rack, and area lighting
  - Interpretive signage – at 11 locations
    - 2-foot by 3-foot plaques set on National Park Service style post
  - o Recreation crossings
    - Includes prefabricated bridge crossings and a soil cement underpass ramp added to existing bank protection at Ina Road.
  - The total first cost of the recreation component of the combined plan is currently estimated at \$13,893,000 million under October 2005 prices.
    - Recreation will be implemented along with the restoration plan.
    - Cost sharing of the recreation elements will be 50 percent Federal and 50 percent non-Federal.

Conclusion: the goals of this plan are consistent with the Master Plan



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### **U.S. Army Corps of Engineers plans – Santa Cruz River, Paseo de las Iglesias Final Feasibility Report (2006)**

The U.S. Army Corps of Engineers (Corps) is conducting a feasibility study in the Paseo de las Iglesias reach of the Santa Cruz River to identify, define, and solve environmental degradation, flooding, and related water resource problems. These efforts are proceeding in partnership with the Pima County Flood Control District, the non-Federal sponsor.

The Paseo de las Iglesias Study Area consists of a segment of the Santa Cruz River and its tributaries, including the Old and New West Branch, extending downstream from Los Reales Road to Congress Street in the City of Tucson, Pima County, Arizona. The study area boundary encompasses an area approximately 7 miles long varying from 0.5 to 1.6 miles wide, and contains approximately 5,005 acres.

- The Selected Plan is an ecosystem restoration project that also provides recreation benefits.

#### **Base Year Conditions**

- In addition to the planned park expansions, future river parks are planned in other parts of the Tucson metropolitan area for Tanque Verde Creek and Pantano Wash.
- Together the Santa Cruz, Rillito, Tanque Verde Creek, and Pantano Wash river parks will function as one large unified regional trail system.
- In the 1997 bond election, funding was approved for the Santa Cruz River Community Park (a sports field complex) along the east bank of the Santa Cruz River, north of Ajo Way.

#### **Recreation Demand**

- Carrying Capacity
  - Pima County has experienced rapid population growth.
  - Pima County's MSA population is 843,746 at year 2000 and is expected to reach 1,518,000 by year 2025—a difference of 674,254 over 25 years. With this increase in population comes an increased demand for recreational facilities.
- Accessibility
  - According to 43 percent of the Arizona Trails 2000 survey respondents, loss of access to trails is one of the top three most important issues facing trail users today.

Description of Recommended Plan – The Selected Plan is an ecosystem restoration project that also provides recreation benefits.





- Recreation
  - The Recreation Plan proposed in conjunction with the recommended restoration plan consists of decomposed granite multi-purpose trails, parking, and trail links that serve a recreation purpose by connecting existing unlinked trail segments and providing opportunities to a variety of recreational users.
  - Comfort stations will serve the basic safety needs of the recreational user.
  - All road segments designated as maintenance provide access to areas in case of emergencies such as flooding and fire.
  - Access will also provide a means to maintain vegetation in the newly restored area and park facilities. Warning signs are also added to direct pedestrians off the newly restored area and guide pedestrians away from any potential danger. These changes will provide a unique opportunity for resource-based recreation and environmental education. Trail alignments and parking locations are shown on Figure 6.2. Placement of comfort stations will be determined during detailed design.

#### Plan Implementation

This chapter summarizes the cost-sharing requirements and procedures necessary to implement the restoration features of the selected plan.

#### **Town of Marana Transportation Plan (from the 2003 General Plan)**

Numerous bicycle and pedestrian facilities have been identified and are planned for implementation over the next 25 years. It is hoped that this planning effort will provide guidance and set the tone for the implementation of effective bicycle and pedestrian facilities and programs as the Town continues to grow. Some of the goals and recommendations for the Town's Transportation Plan that relate to bicycle and pedestrians include:

- Dedicate more local state federal and private funding to construction and maintenance of bicycle and pedestrian facilities. Continue with funding proposals to obtain federal Transportation Enhancement funds for bicycle and pedestrian facilities.
- Establish a program to implement facilities over the near term.
- Require that on-street bicycle lanes, multi-use lanes or paved shoulder are included on all new or reconstructed arterial and collector roadways including those funded by private developers. Require bicycle lanes be provided when left-turn or right-turn lanes are constructed at developments.



- Ensure land use planning accounts for bicycle and pedestrian circulation and safety and requires connectivity from subdivisions.
- Review and provide incentives for mixed use developments, infill projects, and residential commercial educational and cultural nodes that naturally promote bicycling and walking due to their proximity of uses.
- Utilize new 1999 AASHTO and 2000 MUTCD standards in the design of bicycle facilities. Utilize AASHTO standards in the design of pedestrian facilities when they become available.

Conclusion: towns in the area are planning trails within a regional framework

### **Green Valley Community Plan**

The major recreation sponsor for this community is Green Valley Recreation (GVR) with its centers distributed throughout the community. It supports fitness and sports activities plus various games, clubs, tours, social, musical and theater/movie programs. These facilities are only available to GVR members and their out of town guests. Some Homeowner Associations have their own exclusive facilities in place of or in addition to GVR.

There are eight golf courses and a private fitness center within the community, and nearby a bowling alley, miniature golf, and batting cage facility. Green Valley has many multi-use lanes throughout the community used for recreation by bicyclists. Anamax Park in Sahuarita provides recreational facilities used by Green Valley residents.

In addition to the clubs sponsored through Green Valley Recreation, there are a number of independent clubs within the community, including service organizations, common interests and hobbies as well as sporting activities. Hiking Madera Canyon and the Santa Rita Mountains and the visitor's center at the Whipple Observatory on Mount Hopkins are a few of the major neighboring attractions. The historic Juan Bautista de Anza trail offers opportunities for hiking and riding along the Santa Cruz River. Once the trail is completed by Pima County it will link to portions in Sahuarita and Canoa Ranch."

Conclusion: towns in the area are planning trails within a regional framework



**Sahuarita 2002 General Plan, Recreations and Open Space Element**

"Town residents during the first two public workshops raised a number of ideas about meeting their recreational needs. Among them were a trail network (walking, biking and equestrian. Safety was a key concern in terms of non-vehicular access to parks and trail development. Connections to publicly accessible open space were deemed very important as well. Finally, the open space system that is created by the Town should be integrated regionally to the extent possible. Coordination, primarily with Pima County, will be paramount."

Objective: Expand opportunities for recreational bicycling, pedestrian and equestrian uses.

Policies:

REC-1.7.1: Utilize the open space provided by the Santa Cruz River and tributary drainages as a basis for mixed-use and, if determined necessary, specialized use trails. The trail system should ideally link as safely as possible to the pathway system for pedestrians, the street system for bicycles, and rural, larger lot areas for equestrian access.

REC-1.7.2: Inventory all existing neighborhood trails, sidewalks, and bike paths and identify the feasibility of connecting these features together. Develop a system based on that feasibility.

REC-1.7.3: Develop a design standard for new subdivisions and development plans to include recreational trails, and, where feasible, requiring dedication and interconnectivity with the system developed under Policy 1.7.2.

REC-1.7.4: Plan the pathway network to link existing and future parks, as well as recreational open space.

Conclusion: towns in the area are planning trails within a regional framework

**Sahuarita 2008 Parks, Recreation, Trails, and Open Space Master Plan**

One of the goals of the Master Plan is:

Goal #8 - To provide greenways and trails which link parks, commercial and residential areas.

REC 1.5.4 uses Santa Cruz floodplain for recreation both passive/active uses

REC 1.7 opportunities for bicycles, pedestrians and equestrians



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It is recommended that:

- The Department work with Pima County to complete a Trail Master Plan.
- The Pima County Trail Plan and the Sahuarita Town Trail Plan be connected to a strong spine along the Santa Cruz River which connects some existing parks, the new district park, the new regional parks, residential and commercial areas and the Town Center to the system.
- The Departments of Parks and Recreation and Planning and Zoning work to encourage developers to build the trail spine.



The Master Plan reviews the current status of the town's greenways and trails and notes:

There are currently 5 miles of pathways and 15 miles of bike lanes in the Town of Sahuarita's proposed trail system, which includes a Pedestrian and Bicycle Plan. The Pedestrian Plan is a system of multi-use trails that links communities to parks, schools and the Santa Cruz River by using existing and proposed roadways, easements and open space. The Bicycle Plan consists of bike paths and bike lanes that follow major roadways from community centers to the town center, the Santa Cruz River and other destinations.

The Master Plan proposes:

A central greenway along both sides of the Santa Cruz River would provide a connection to proposed Town and County trails, create recreation opportunities, prevent future development in the flood plain and provide essential habitat corridors to nearby riparian areas.

Additional greenways and trails would link the Santa Cruz Greenway to existing and future town parks.

Recommendation #4 of the Parks, Greenways, Trails and Standards section states:

The recommendation is to develop a Greenway and Trail Master Plan in conjunction with Pima County. The master plan will connect the Pima County Trail Plan and the Sahuarita Town Trail Plan to a strong spine along the Santa Cruz River which connects some existing parks, the new district park, the new regional parks, residential and commercial areas and the Town Center to the system.

Conclusion: the Town is proposing to increase the number of trail facilities and is working with the regional trail framework



### A-5: Pima County Projects List

#### TRAILS

##### Project

##### Anza Trail

- ☐ Implement the Anza Trail consistent with the recommendations of the adopted Anza Trail Master Plan and guidelines for the Anza Trail from the National Park Service.
- ☐ Integrate the Anza Trail into any new master plan prepared for the Santa Cruz River Park.
- ☐ Integrate the Anza Trail as per the Anza Trail Master Plan into all new segments of the Santa Cruz River Park constructed by local, state, or federal governments, or as a part of a commercial or residential development project.

##### CAP Trail

- ☐ Implement the CAP Trail in cooperation with the U.S. Bureau of Reclamation consistent with the *CAP Trail Master Plan*.
- ☐ Support the location of the trail on top of the dike. Consult the CAWCD Board if needed to secure the proper site.
- ☐ Support the development of a land bridge over Interstate 10 in the Tangerine Road area to place trail over the freeway.
- ☐ Support the creation of complementary trails and/or actual trails parks in the "green up" areas along the CAP corridor.

##### Arizona Trail

- ☐ Support setbacks of 350 feet from new developments north and south of Interstate 10. Require development projects to enhance the vegetation in this corridor to secure adequate buffers.
- ☐ Support Santa Rita Mountain Park, through which the Arizona Trail traverses.
- ☐ Support the protection of the Highway 83 Scenic Gateway and the quality of the Arizona Trail National Scenic Trail.

##### Tucson Mountain Park

- ☐ Revise and enhance the trail system in accordance with the Park's *2008 Management Plan*.
- ☐ Obtain the 1,052-acre BLM disposal property along the southern boundary of the Park to create new recreational opportunities and the provision of at least two public access points into the park.

##### Tortolita Mountain Park

- ☐ Develop a formal trail system in the park, consistent with the *Tortolita Mountain Park Trails Master Plan*.
- ☐ Establish public access points in several locations around the perimeter of the park, consistent with the Tortolita Mountain Park Master Plan and the Tortolita Mountain Park Trails Master Plan. One such access point is a new trailhead on the east side of the Park in the Crow Wash area.

##### Colossal Cave Mountain Park

- ☐ Create new public trailhead facilities just outside the Park's main gate immediately east of Old Spanish Trail, and just outside the Park's south gate, immediately south of Colossal Cave Road.  
The north gate will serve the Park and the Old Spanish Trail Bicycle and Pedestrian Path. The south gate will provide access to the Arizona Trail and the Park's internal trail system from outside the Park boundary.
- ☐ Reconfigure the Park's existing equestrian trail system.
- ☐ Reconfigure the remainder of the Park's existing trail system so the trails are orderly and functional.
- ☐ Add an accessible trail.
- ☐ Support a new five-mile loop trail around Pistol Hill.

##### Cienega Creek Natural Preserve



- ☐ Support additional trails identified in the Cienega Creek Natural Preserve Management Plan in cooperation with the Pima County Regional Flood Control District.
- ☐ Support to reduce the speed limit and install user-actuated warning lights, signs, and striping to enhance trail user safety on the Marsh Station Road Bridge across the Cienega Creek.
- ☐ Improve all three existing trailheads. The Davidson Canyon Trailhead parking lot could be expanded, a designated equestrian staging area could be created, signs could be improved, and interpretive information could be installed.
- ☐ Use Open Space Bond and Regional Flood Control District funding to expand the Preserve, creating the opportunity to add recreational trails.
- ☐ Support the development of an 11-mile Cochise Trail to connect the Arizona Trail segment that passes through the Preserve with Pima County's McKenzie Ranch and Walden Ranch properties, as well as the Cochise County Trail System.

#### **Catalina State Park**

- ☐ Support improvements to the Park's existing recreational trail system and trails-related facilities.

#### **Saguaro National Park, Rincon Mountain District**

- ☐ Site and construct a key section of the Arizona Trail in the park to connect the existing backcountry segment of the trail with Hope Camp and the northern end of Pima County's segment of the trail, consistent with the trails plan element of the Park's new General Management Plan.
- ☐ Develop a trailhead at the eastern end of Broadway Boulevard, just outside the Park boundary.
- ☐ Develop a formal trailhead facility at the northern end of Camino Loma Alta to provide access into the Park's East Expansion area.
- ☐ Connect the Shurban Wash Trail to the western boundary of the park, midway between Escalante and Irvington roads.

#### **Saguaro National Park, Tucson Mountain District**

- ☐ Support new recreational trails in the Park, consistent with the trails plan element of the Park's new General Management Plan.
- ☐ Support a link between the Park's trail system and the Central Arizona Project Trail.

#### **Coronado National Forest, Santa Catalina Ranger District**

- ☐ Support an access to the Forest 1) from the east end of Roger Road and 2) from the Milagrosa Canyon/Agua Caliente Hill area (Horsehead Road). Also see System Access.
- ☐ Support additional Forest public access points to the Tucson metropolitan area along the southern boundary of the district including
  - at the north end of the Houghton Road corridor to provide access to the historic Soldier Trail and
  - the north end of Bowes Road (the northern continuation of the Harrison Road alignment).
- ☐ Support additional recreational trails in the Agua Caliente Hill area of the Forest in cooperation with the Coronado National Forest and the staff of the Santa Catalina Ranger District.

#### **Coronado National Forest, Nogales Ranger District**

- ☐ Support a new public trailhead access point into the northernmost portion of the range from the south end of the Houghton Road corridor.
- ☐ Support an Arizona Trail segment between Lakes Road and Oak Tree Canyon.
- ☐ Support additional recreational trail opportunities in the district, in coordination with Forest staff, including:
  - a new hiking trail from the south end of Houghton Road to Mount Fagan and
  - new trails in the western foothills of the range.

#### **Empire-Cienega Resource Conservation Area (RCA)**

- ☐ Support a connection between the Arizona Trail and the RCA per the RCA's management plan.



- ☐ Support access into the Whetstone Mountains from the Empirita Ranch area in conjunction with BLM, the Forest Service, Pima County, and the Arizona State Land Department.
- ☐ Support additional recreational trail opportunities in the RCA and State Trust Lands within the Las Cienegas National Conservation Area consistent with the adopted Empire-Cienega Resource Conservation Area Management Plan and the direction of the Tucson Field Office staff and the Arizona State Land Department.

#### **Ironwood Forest National Monument**

- ☐ Support new trail corridors linking the Regional Trail System to the eastern boundary of the monument.
- ☐ Identify locations for future trailhead staging areas into the monument from its eastern boundary.

#### **Santa Rita Mountain Park**

- ☐ Support development of additional trails within the Santa Rita Mountain Park consistent with the Park's management plan.
- ☐ Support development of a trailhead staging facilities adjacent to or on the park property.

#### **Sierrita Mountain Park**

- ☐ Support a formal access point or points on the eastern and western sides of the range.
- ☐ Support the implementation of the master plan-listed trails in the area.
- ☐ Support acquisition of open space around the range, such as the Winterhaven Ranch to provide opportunities to establish public access and develop new recreational trail opportunities adjacent to the Sierrita Mountains.

#### **Cerro Colorado Mountain Park**

- ☐ Support a new mountain park encompassing the Cerro Colorado mountain range.

#### **Empire Mountain Park**

- ☐ Create a mountain park encompassing the Empire Mountains.

### **Other Opportunities**

- Support the acquisition of the tract of Arizona State Trust Land located between the Cerro Colorado and Sierrita mountain ranges.
- Support opportunities for recreational trail users, particularly equestrians, within the boundaries of Tucson Water's 30,000 acres in Avra Valley.
- Support the acquisition of State Trust Land between the Sierrita Mountains and the Tohono O'odham reservation, immediately south of the Garcia Strip.

### **RIVER PARKS**

#### **Project**

#### **Santa Cruz River Park**

- ☐ Acquire right-of-way to develop the River Park on both banks.
- ☐ Connect the Santa Cruz, Cañada del Oro, Rillito, and Julian Wash Greenway corridors to create a functional system.
- ☐ Support the acquisition of sand and gravel operations on the east bank between Sunset and Orange Grove roads and building a crossing under Ajo Way.
- ☐ Upgrade old trail segments where they are too narrow, where bridge sections are not fully functional, or materials used previously have become hazardous.
- ☐ Prepare a corridor master plan to guide development.





## RIVER PARKS

### Project

#### Rillito River Park

- ☐ Connect the Rillito River Park to the Santa Cruz River Park.
- ☐ Convert the south bank of the Rillito from pedestrian and equestrian use only to the divided urban pathway cross section (see Trail Standards).
- ☐ Acquire the needed right-of-way to implement the divided urban pathway cross section along the River Park's entire length.
- ☐ Update the corridor master plan to guide development.

#### Cañada del Oro River Park

- ☐ Update existing master plan documents to reflect current conditions and extend CDO River Park west to connect with the completed segment west of La Cholla Boulevard (at Tucson National Golf Course).
- Eliminate gaps as needed and possible to complete CDO River Park south bank development from First Avenue to Big Wash.

#### Tanque Verde River Park

- ☐ Acquire the needed right-of-way for the River Park for the full, three-mile stretch.
- ☐ Prepare a corridor master plan to guide development.

## TRAILS PARKS

### Project

#### Fantasy Island

- ☐ Redesign the trail system to enhance its sustainability.

#### Greasewood Park

- ☐ Create additional trails on the site, including trails for physically-challenged users, consistent with the park's master plan.
- ☐ Support link from Greasewood Park to Sentinel Peak Park by creating a new connector trail across Arizona Game and Fish Department's property and along the south side of Anklam Road, crossing VA property to connect with Sentinel Peak park.

#### Green Valley West Desert Preserve

- ☐ Support the preservation of approximately 2,017 acres State Trust Land property and develop additional trails, including trails for physically-challenged users.

#### Habitat for Humanity Property

- ☐ Design and build a three-mile loop trail for the park.

#### Catalina Regional Park

- ☐ Design and build recreational trails for equestrians.

#### Raul M. Grijalva Canoa Ranch

- ☐ Develop recreational trails consistent with the adopted master plan.

#### A7 Ranch

- ☐ Support recreational trails for hikers, mountain bikers, and equestrians.

#### McKenzie Ranch

- ☐ Support a mountain bike competition course.
- ☐ Support recreational trails for other non-motorized users.

#### Walden Ranch

- ☐ Support a trail system on the property.

#### Golf Links

- ☐ Support trails on the property for runners, walkers, and cyclists.



**TRAILS PARKS****Project****Empirita Ranch (Pima County)**

- ☐ Support an equestrian trails park and horse camp on the property.

**36th Street Properties**

- ☐ Support the acquisition of the four foothill properties for possible addition to Tucson Mountain Park and develop a trails park.

**Rita Ranch Flood Control Basin**

- ☐ Support the development of the eight-acre flood control basin, located immediately west of the Rita Ranch subdivision, into a small trails park.
- ☐ Support the connection of the basin to the Julian Wash Greenway on the U of A Science and Technology Park by creating a small connector trail between the basin and the greenway.

**Atturbury Preserve**

- ☐ Support the designation of a natural preserve and equestrian/hiking facility.

**Valencia Trust Land Trails Park**

- ☐ Support the acquisition of the 400-acre State Land property, north of Valencia Road, into a natural resource trails park.

**Kinnison Wash Trails Park**

- ☐ Support the acquisition of the 80-acre State Land parcel, that straddles the Kinnison Wash just north and east of the intersection of Kolb and Irvington roads, into a trails park.

**“The Habitat” Trails Park**

- ☐ Support the development of a walking path on this 20-acre parcel located at the south-east corner of 36th Street and Kino Boulevard.

**Agua Caliente Trails Park**

- ☐ Support the development of an equestrian trails park on the 20-acre parcel, immediately west of Houghton Road and bisected by Agua Caliente Creek.
- ☐ Support expansion of the park by using the Houghton Road right-of-way that abuts the park.

**TRAILHEADS, ENTRY NODES, AND BOUNDARY ACCESS POINTS****Project****Roger Road**

- ☐ Reestablish access to Coronado National Forest from the east end of Roger Road.

**Milagrosa Ridge/Canyon and Agua Caliente Canyon**

- ☐ Support the acquisition of the 1/2 mile private segment of Horsehead Road between Avenida de Suzenu and the western end of the public portion of Horsehead Road that provides access to Milagrosa Canyon.
- ☐ Support the purchase of parcels that provide access to Agua Caliente Canyon to ensure perpetual public access to this canyon.

**South Houghton**

- ☐ Support obtaining access from the southern end of the Houghton Road alignment to the northern boundary of the Nogales Ranger District of the Coronado National Forest.

**Whetstone Mountains**

- ☐ Work with the Arizona Game and Fish Department and the U.S. Forest Service obtain access to the Whetstone Mountains.

**Coronado National Forest Access**

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## **TRAILHEADS, ENTRY NODES, AND BOUNDARY ACCESS POINTS**

### **Project**

- ☐ Support an access point at the northern terminus of Bowes Road, which is an extension of the Harrison Road alignment.

### **Tangerine Trailhead**

- ☐ Support a trailhead, immediately east of the CAP canal and approximately 1,900 feet north of Tangerine Road.

### **Avra Valley Trailhead**

- ☐ Support a staging area for the CAP Trail approximately 2,800 feet east of the CAP canal and immediately south of Avra Valley Road.

### **Colossal Cave North and South Trailheads**

- ☐ Support the Colossal Cave North Trailhead (located immediately east of Old Spanish Trail just outside the front gate of Colossal Cave Mountain Park) and the Colossal Cave South Trailhead (located immediately south of Colossal Cave Road just outside of Colossal Cave Mountain Park's south gate).

### **Pistol Hill Loop Trailhead**

- ☐ Support this facility at the southeast corner of Pistol Hill Road and Old Spanish Trail.

### **Sahuarita Road Trailhead**

- ☐ Support location of a trailhead at the corner of Highway 83 and Sahuarita Road.
- 



**A-6: Feature Numbers Cross Referenced to 1996 Plan****Trails**

2009 Feature Number	2009 Feature Name	1996 Feature Number	1996 Trail Name
BCT001		1	Agua Caliente Wash
BCT002	Canada del Oro	1	
RP002		2	Canada del Oro
T006		3	Central Arizona Project Canal
G020/G021	Flato and Franco Greenways	4	Flato/Franco Wash System
RP003		5	Pantano Wash
RP004		6	Rillito River
BCT007		7	San Pedro River
RP005		8	Santa Cruz River
BCT009		9	Tanque Verde Wash
RP006	Tanque Verde River Park	9	Tanque Verde Wash
BCT010		10	Black Wash
BCT011		11	Brawley Wash
BCT012		12	Prospector's Extension
BCT013		13	Saginaw Hill
BCT014		14	West Branch Santa Cruz River
G003	Ajo Way Greenway	15	Ajo Way
G011	Avra Valley Rd Greenway	16	Avra Valley Rd
BCT017		17	Ft. Lowell
BCT018		18	Manville Rd
BCT019		19	Orange Grove Rd
BCT020		20	Picture Rocks Rd
BCT021		21	San Joaquin Rd
BCT022		22	Sanders Rd
BCT023		23	Gas Pipeline
BCT024		24	<del>Enchanted Hills</del> /West Branch of Santa Cruz River
T014	Enchanted Hills Trail	24	<del>Enchanted Hills</del> /West Branch of Santa Cruz River
BCT025		25	Picture Rocks Wash
BCT026		26	Roger Wash/Roger Extension
BCT027		27	Sweetwater Wash
BCT028		28	Wild Horse Wash
BCT029		29	Catalina Park/Flat Rock
BCT030		30	Big Wash/Hawser to Catalina park/Flat Rock Trail
BCT031		31	Cochie Wash
BCT032		32	Cottonwood Wash
BCT033		33	La Cholla/Honey Bee Loop
BCT035		35	Sutherland Wash
BCT036		36	Wild Burro Wash
BCT037		37	Chalk Mine Rd/Edwin Rd alignment
BCT038		38	Caliente Hill Wash
BCT039		39	Canyon del Salto
BCT040		40	Esperero Wash
BCT041		41	Finger Rock Wash
BCT042		42	Geronimo Wash
BCT043		43	Pima Wash
BCT044		44	Pine Tree Wash
BCT045		45	Sabino Creek West
BCT046		46	Shurban Loop
BCT047		47	Ventana Canyon Wash
P028	Old Spanish Trail Path	48	
BCT049		49	Buehman Canyon
BCT050		50	Edgar Canyon
BCT051		51	Soza/Canada Atravesada-Saucito Canyon
BCT052		52	Soza/Espiritu Canyon
BCT053		53	Redington Rd
	now in Sag NM	54	Chimenea Creek
BCT055		55	Cienega Creek
BCT056		56	Davidson Canyon
BCT057		57	Hidden Springs
BCT058		58	Lower Agua Verde Creek
BCT059		59	Mescal Arroyo



2009 Feature Number	2009 Feature Name	1996 Feature Number	1996 Trail Name
BCT060		60	Monument Boundary Trail
BCT061		61	Posta Quemada
BCT062		62	Rincon Creek
G036	Rincon Greenway	62	Rincon Creek
BCT063		63	Total Wreck Wash and Trail
BCT064		64	Colossal Cave/Vail Rd
BCT065		65	Houghton Rd
G025	Houghton Rd Greenway	65	Houghton Rd
BCT066		66	Marsh Station Rd
P028	Old Spanish Trl Path	67	Old Spanish Trail
BCT068		68	Pistol Hill/Papago Springs Rd
BCT069		69	Pistol Hill Rd (private)
G044	Sahuarita Greenway	70	Sahuarita Rd
BCT071		71	Wentworth Rd
BCT072		72	X-9 Ranch Rd (private)
BCT078		73	Powerline
BCT074		74	Alvernon Extension
BCT075		75	Ash Wash
BCT076		76	Alvernon Way/Dawson Rd
BCT077		77	Demetrie Wash
BCT078		78	Esperanza Wash (Tinaja Wash)
BCT079		79	Fresnal Wash
BCT080		80	Madera Canyon Wash
BCT081		81	Proctor Wash/Bob Brown Lateral
BCT082		82	Cerro Colorados South Access Rd
BCT083		83	Continental Rd
BCT084		84	Duval Mine Rd
BCT085		85	Elephant Head/Hawk Way
BCT086		86	Madera Canyon Rd
BCT087		87	McGee Ranch Rd
BCT088		88	Mission Rd
BCT100		100	Aldon Rd and East and West Forks
BCT101		101	Beehive Trail
BCT102		102	Cardinal Trail
BCT103		103	Dakota Wash
BCT104		104	Ironwood Link
BCT105		105	Pena Wash
BCT106		106	Bilby Rd
BCT107		107	Bopp Rd
BCT108		108	Calle Anasazi
BCT109		109	Cardinal Ave
BCT100		110	Carol Ave
BCT111		111	Castle Dr
BCT112		112	Chipewa Rd
BCT113		113	Deaver Rd
BCT114		114	Hilltop Rd
BCT115		115	Irvington Rd
BCT116		116	Michigan St
BCT117		117	Naomi Rd
BCT118		118	Nebraska Rd
BCT119		119	Sandario Rd
G045	Sandario Greenway	119	Sandario Rd
BCT120		120	Scenic Dr
BCT121		121	Sierrita Mtn Rd
P033	Silverbell Rd Path	122	Silverbell Rd
BCT123		123	Tucson Estates Pkwy
BCT124		124	Twin Peaks Rd
G030	Manzanita Greenway	125	Gas pipeline
BCT126		126	Anklam Local
BCT127		127	Belmont Loop
T007	Cholla Wash Trail	128	Cholla Wash
BCT129		129	Greasewood Loop
BCT130		130	Middle Branch of East Idle Hr Wash
BCT131		131	North Fork Roger Wash
BCT132		132	Painted Hills Wash
BCT133		133	Safford Peak
T010	Connec to Habitat for Hum TP	134	San Juan Wash
BCT135		135	Shannon Wash
BCT136		136	Silvercroft Wash
BCT137		137	South Branches of East Idle Hr Wash
BCT138		138	South Fork Roger Wash
BCT139		139	South Sweetwater



2009 Feature Number	2009 Feature Name	1996 Feature Number	1996 Trail Name
BCT140		140	Speedway Wash
BCT141		141	Sweetwater Trail Rd
BCT142		142	Thirty-sixth St Extension
BCT143		143	Trails End Wash
BCT144		144	West Idle Hour Wash
BCT145		145	Yuma Mine Trail
BCT146		146	Belmont Rd
BCT147		147	Cottonwood Ln
BCT148		148	El Camino del Cerro
P015	Greasewood Rd align Path	149	Greasewood Rd
BCT150		150	Ironwood Hill Dr
P024	Mission Rd Path	151	Mission Ln
P024	Mission Rd Path	152	Silverbell/Congress/Grande/Mission
P033	Silverbell Rd Path	152	Silverbell/Congress/Grande/Mission
BCT153		153	Sweetwater Dr
G022	Greasewood Rd align Greenway	154	Greasewood Utility Easement
P015	Greasewood Rd align Path	154	Greasewood Utility Easement
BCT155		155	Gas pipeline
RP001		156	Big Wash
BCT157		157	Cedar Breaks
BCT158		158	El Camino de Manana Wash
BCT159		159	Golder Ranch Loop to Little Cottonwoods
BCT160		160	Hardy Wash
BCT161		161	La Cholla East
BCT162		162	Little Cottonwood Link
BCT163		163	Prospect Wash
BCT164		164	Scottie's Loop
BCT165		165	Shannon Extension
BCT166		166	South Lago Link
BCT167		167	Tortolita Foothills Trail
BCT168		168	Twenty-seven Wash
BCT169		169	Bowman Rd
BCT170		170	Lambert Ln
BCT171		171	Moore Rd alignment
BCT172		172	Potvin Rd
BCT173		173	Rollin Rd
BCT174		174	Shannon Rd
BCT175		175	Thornysdale Rd
BCT176		176	Tortolita Rd
BCT177		177	Twin Lakes
BCT179		179	Power transmission line
BCT180	WAPA Line Trail	180	Power Line Rd
BCT181		181	Agua Caliente/Conestoga
BCT182		182	Campbell/Camino Real
BCT183		183	Carmack Wash
BCT184		184	Casas Adobes Loops
BCT185		185	Casas Adobes Loops
BCT186		186	Cloud Wash and Ridge
T011	Coronado Ridge Wash Trail	187	Coronado Ridge Wash
BCT288		188	Craycroft Wash
BCT189		189	Escalante Wash
BCT190		190	Flecha Caida Wash
BCT191		191	Forty Niners Wash
BCT192		192	Freeman/Del Este/Calle Catalina
BCT193		193	Friendly Village/Via Entrada
BCT194		194	Hacienda del Sol Wash
	now golf course	195	Harrison-Houghton Link
G023	Hidden Hills Wash Greenway	196	Hidden Hills Wash
T018	Hidden Hills Wash Trail	196	Hidden Hills Wash
BCT197		197	Las Lomitas Wash
BCT198		198	Melpomene Loop
BCT199		199	Orange Ave/Tomahawk
BCT200		200	Pegler Wash
BCT201		201	Pontatoc/Valley View/Flecha Caida
BCT202		202	Pontatoc Wash
BCT203		203	Pontatoc Wash



2009 Feature Number	2009 Feature Name	1996 Feature Number	1996 Trail Name
BCT210		210	Valley View Wash
BCT211		211	Via Entrada Wash
BCT212		212	Via Entrada Wash-east tributary
BCT213		213	Ave del Conejo
BCT214		214	Bear Canyon Rd alignment
BCT215		215	Birch Way alignment
BCT216		216	Broadway Blvd
BCT217		217	Calle Loma Linda alignment
BCT218		218	Camino Coronado/Camino de Anza
BCT219		219	Ft. Lowell Rd
BCT220		220	Hardy Rd alignment
G025	Houghton Rd Greenway	221	Houghton Rd
BCT222		222	Jeanette Ave
BCT223		223	Kleindale Rd
T019	La Canada Dr Trail	224	La Canada Dr
BCT225		225	La Oeste/Pine St/Morningview Dr
BCT226		226	Linda Vista Blvd
BCT227		227	Melpomene Way
BCT228		228	Melpomene Way alignment
BCT229		229	Montebella Rd
BCT230		230	Prince Rd
BCT231		231	Redington Rd
BCT232		232	Roger Rd alignment
BCT233		233	Roger Rd
BCT234		234	Snyder Rd alignment
BCT235		235	Tanque Verde Rd
BCT236		236	Verch Way
BCT237		237	Wentworth Rd alignment
BCT238		238	Woodland Rd east end alignment
BCT239		239	Friendly Village drainageway
BCT240		240	Linda Vista easement
BCT241		241	Pine Tree Wash to Prince Rd
BCT242		242	Agua Verde Link
BCT243		243	Agua Verde North Fork
BCT244		244	Andrada Ranch Link
BCT245		245	Arrowhead
BCT246		246	Coyote Wash
BCT247		247	Davidson Local
BCT248		248	Davidson Loop
BCT249		249	Garrigans East
BCT250		250	Garrigans Loop
BCT251		251	Gas-Power East
BCT252		252	Gas-Power Middle
BCT253		253	Gas-Power West
BCT254		254	Hope Camp
	now in Sag NM	255	Hope Camp East Loop
BCT256		256	Mt Fagan East Loop
BCT257		257	Mt Fagan West Loop
BCT258		258	North Coyote
BCT259		259	Phoneline Link
BCT260		260	Red Hill Ranch Rd
BCT261		261	Rincon Creek South Fork
	now in Sag NM	262	Rincon-Madrone Link
BCT263		263	Rocking K
BCT264		264	Sahuarita-Mt Fagan Link
BCT265		265	Thunderbird Trail
BCT266		266	Total Wreck Local
BCT267		267	Twin Tanks
BCT268		268	Upper Agua Verde Creek
BCT269		269	Vail Loop/Gas Pipeline
BCT270		270	Andrada Rd
BCT271		271	Arizona Hwy 83
G047	Sonoita Greenway	271	
G013	Camino Loma Alta Greenway	272	Camino Loma Alta
BCT273		273	Davidson Rd
BCT274		274	Garrigans Gulch
BCT275		275	Old Sonoita Hwy
BCT276		276	Cross Hill/Pipeline
G018	Esmond Station G	277	Esmond Station Railroad Trail
BCT278		278	Gas pipeline
G034	Power Line Greenway	278	
BCT279		279	Power Line





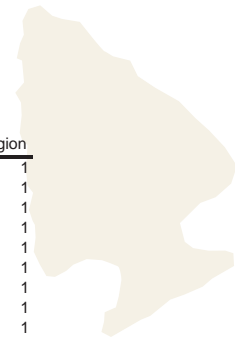
## APPENDICES

2009 Feature Number	2009 Feature Name	1996 Feature Number	1996 Trail Name
BCT280		280	Power Line
BCT281		281	Arroyo #17
BCT282		282	Canoa West Loop
BCT283		283	Cattle Loop
BCT284		284	El Toro Rd to Dawson Rd
BCT285		285	Head East Trail
BCT286		286	Upper Agua Verde Creek/Power Line
BCT286		286	Helmet Peak Loops
BCT287		287	Landing Strip
BCT288		288	Pig Farm
BCT289		289	Power Line Loop
BCT290		290	Tailings Pond Rd
BCT291		291	Well Trail
BCT292		292	West Loop-Green Valley
BCT293		293	West Madera Loop
BCT294		294	Ruby Star Ranch Rd to La Villita
BCR295		295	Abrego Rd
BCT296		296	Batamote Rd
BCT297		297	Camino del Sol
BCT298		298	Country Club Rd
BCT299		299	Delgado Rd
BCT300		300	Duval Mine Rd
BCT301		301	El Toro Rd/East
BCT302		302	La Canada
BCT303		303	Las Quintas
BCT304		304	Mission Twin Buttes
BCT305		305	Santa Rita Rd
BCT306		306	Green Valley/West Grant boundary line power line
BCT307		307	Power Line/Country Club Rd
G001	Airport Wash Greenway	308	Airport Wash
T023	replaced by the Power Line Trail	308	Airport Wash
G004	Alamo Wash Greenway	309	Alamo Wash
G005	Arcadia Wash Greenway	310	Arcadia Wash
G007	Arroyo Chico West Greenway	311	Arroyo Chico
G008	Atturbury Wash Greenway	312	Atterbury Wash
G014	Citation Greenway	314	Citation Wash
G039	part of the Rodeo Wash Gnwy	315	Earp Wash
G024	High School Wash Greenway	316	High School Wash
G027	Julian Wash Greenway	317	Julian Wash
G028	Kinnison Wash Greenway	318	Kinnison Wash
G039	Rodeo Wash Greenway	319	Rodeo Wash
G042	Rose Hill Wash Greenway	320	Rose Hill Wash
BCT321		321	Eighteenth St
	replaced by Enc Corri on Tucson Blvd	322	Jackson Ave
BCT323		323	Kroeger Ln
G017	El Paso SW Gas Greenway	324	Abandoned El Paso and Southwestern RR ROW
BCT199	Harrison Rd		



## Access Points

2009 Feature Number	2009 Feature Name	1996 Feature Number	1996 BAP Name	1996 Subregion
BAP128	Aldon Road	1	Aldon Road	1
BAP129	Calle Anasazi	2	Calle Anasazi	1
BAP130	CAP/San Joaquin	3	CAP/San Joaquin	1
TH082	Cat Mountain	4	CAP Tunnel - TMP (Starr Pass W.)	1
BAP071	Fort Lowell Road	5	Fort Lowell Road	1
TH084	Explorer	6	Gas pipeline	1
BAP136	Tucson Estates Parkway	7	Golden Gate	1
BAP072	Manville Road	8	Manville Road	1
BAP131	Naomi Road	9	Naomi Road Wash	1
	(deleted)	10	Old Ajo Way	1
TH054	Picture Rocks Road	11	Picture Rocks Road	1
BAP132	Prospector's Extension	12	Prospector	1
TH086	Sarasota	13	Sarasota Road	1
BAP074	Picture Rocks Wash South 1	14	Box Canyon	2
TH052	El Camino del Cerro	15	El Camino del Cerro	2
TH080	Camino de Oeste	16	El Camino de Oeste	2
TH079	36th Street	17	Enchanted Hills Wash	2
	(deleted)	18	Greasewood Road	2
BAP073	Picture Rocks Wash North	19	Ina Road	2
BAP076	Roger Wash Extension	20	Roger Extension at SNMW	2
BAP080	South Sweetwater	21	Roger Extension at TMP	2
BAP078	Roger Wash North Fork	22	Roger Wash	2
BAP133	Scenic Drive	23	Scenic Drive	2
TH087	Starr Pass East	24	Starr Pass East	2
BAP082	Sweetwater Wash	25	Sweetwater Wash	2
BAP081	Sweetwater Road Trail	26	Sweetwater Trailhead	2
BAP135	Trails End Wash	27	Trails End Wash	2
BAP086	Yuma Mine Trail	28	Yuma Mine	2
BAP107	Catalina State Park North (moved north)	29	Canada del Oro/Catalina State Park North	3
	(deleted)	30	Canada del Oro/Catalina St. Park South	3
	(deleted)	31	Cottonwood Wash	3
	(deleted)	32	Cottonwoods	3
	(deleted)	33	Crow Windmill	3
BAP028	Flat Rock	34	Flat Rock	3
BAP021	Canyon Vista Road	35	Harm Gate	3
BAP113	Honeybee Canyon Trail E2	36	Honeybee	3
BAP117	Little Cottonwoods	37	Little Cottonwoods	3
BAP037	Middle Gate	38	Middle Gate	3
BAP108	Canada del Oro (moved north and west)	39	North Catalina Park	3
	(deleted)	40	Ruelas Canyon	3
	(deleted)	41	Shannon North	3
BAP119	Swan Rd align (moved north and west)	42	Sutherland	3
BAP120	Tortolita Foothills Trail	43	Tortolita Road	3
TH078	Wild Burro Trail	44	Wild Burro	3
TH019	Finger Rock Wash	53	Finger Rock	4
BAP033	Houghton Road	54	Houghton Road	4
TH021	Linda Vista	55	Linda Vista	4
TH051	Old Spanish Trail	56	Old Spanish	4
TH020	Iris Dewhirst Pima Canyon	57	Pima Canyon	4
TH022	Sabino Canyon Recreation Area	58	Sabino Canyon Main Entrance	4
BAP066	Saguaro Natl Park	59	Saguaro NME Main Entrance	4
BAP043	Tanque Verde Creek	60	Tanque Verde Creek	4
TH016	Avenida de Suzenu	45	Agua Caliente Canyon	4
TH015	Agua Caliente Park (moved east)	46	Agua Caliente Hill North	4
TH014	Agua Caliente Hill South (moved east)	47	Agua Caliente Hill South	4
TH017	Bear Canyon Road	48	Bear Canyon Road	4
TH048	Broadway Gate (moved east)	49	Cactus Forest Campbell Avenue	4
TH018	Campbell	50	Campbell Avenue	4
BAP020	Canyon del Salto	51	Canyon del Salto	4
TH050	Douglas Spring	52	Douglas Spring	4
	(deleted)	64	Buehman Canyon North	5
BAP019	Buehman Canyon South	65	Buehman Canyon South	5
BAP0254	Edgar Canyon	66	Edgar Canyon	5
BAP040	Pelon Spring	67	Pelon Spring	5
BAP042	Soza Canyon/Espiritu Canyon	68	Soza Canyon/Espiritu Canyon	5
BAP067	Wentworth Road	61	Wentworth	4



2009 Feature Number	2009 Feature Name	1996 Feature Number	1996 BAP Name	1996 Subregion
	(deleted)	62	Wildhorse	4
TH023	Ventana Canyon	63	Ventana Canyon	4
BAP060	Hope Camp (moved south)	78	Hope Camp	6
BAP034	Houghton Rd	79	Houghton Road	6
	(deleted)	80	Madrona	6
BAP038	Mulberry	81	Mulberry	6
BAP039	Papago Springs	82	Papago Springs	6
BAP062	Phoneline Link	83	Phoneline	6
BAP041	Posta Quemada	84	Posta Quemada	6
BAP063	Rincon Creek East	85	Rincon Creek	6
BAP016	Agua Verde Link	69	Agua Verde Link	6
BAP017	Agua Verde North Fork	70	Agua Verde North Fork	6
BAP018	Arrowhead	71	Arrowhead	6
BAP003	Agua Verde Link North	72	Cienega East	6
TH010	Cienega West	73	Cienega West	6
	(deleted)	74	Davidson North	6
BAP022	Davidson Canyon	75	Davidson South	6
BAP023	Distillery Canyon	76	Distillery Canyon	6
BAP032	Hidden Springs	77	Hidden Springs	6
BAP087	Alvermon Extension	92	Alvermon Extension	7
BAP096	Ash Wash	93	Ash Wash	7
BAP002	Proctor Wash/Bob Brown	94	Bob Brown	7
BAP001	Cerro Colorados	95	Cerro Colorados South/Arivaca Road	7
BAP0254	Elephant Head	96	Chino Basin	7
BAP097	Demetrie Wash	97	Demetrie Wash/Sierritas	7
BAP098	Esperanza Wash	98	Esperanza/Tinaja Washes	7
BAP099	Fresnal Wash	99	Fresnal Canyon	7
BAP088	Alvermon Way/Dawson Rd	100	Helvetia Wash	7
	(deleted)	86	Rincon-Madrona	6
BAP065	Rincon South Fork	87	Rincon South Fork	6
	(deleted)	88	Rocking K	6
BAP055	The Narrows	89	The Narrows	6
BAP054	Total Wreck	90	Total Wreck	6
BAP068	X-9 Ranch Road	91	X-9	6
BAP089	Madera Canyon Road	101	Madera Canyon Road	7
BAP036	Madera Canyon Wash	102	Madera Canyon West	7
BAP100	McGee Ranch Rd	103	McGee Ranch Road	7
BAP101	Proctor Wash/Bob Brown	104	Sierritas South/Proctor Wash	7







Rillito River Park Trail and Path





